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ABSTRACT

This guide is written for the social studies curriculum developer interested in developing a structured multidisciplinary program based on the concepts, methodology, and structure of social science disciplines and history. Seven 15-29 page chapters are included on each discipline: Anthropology and Psychology, by Charles R. Berryman; Economics, by Theodore C. Boyden; Geography, by John M. Ball; History, by Jim B. Pearson; Political Science, by Marion J. Rice; and, Sociology, by Paul E. Kelley. Within each chapter the disciplines are in terms of: 1) scope, breadth, or range of subject matter in the discipline; (2) kinds of basic questions to which answers are sought; 3) chief methods, techniques, or procedures for investigation; 4) key concepts in the disciplines; 5) structure or general approaches in the disciplines; and, 6) recent trends and new emphasis. This same structure is applied to a final chapter by the editor, Multidisciplinary Social Sciences, a discipline that encompasses the interrelated components of the social sciences. (Author/DJB)

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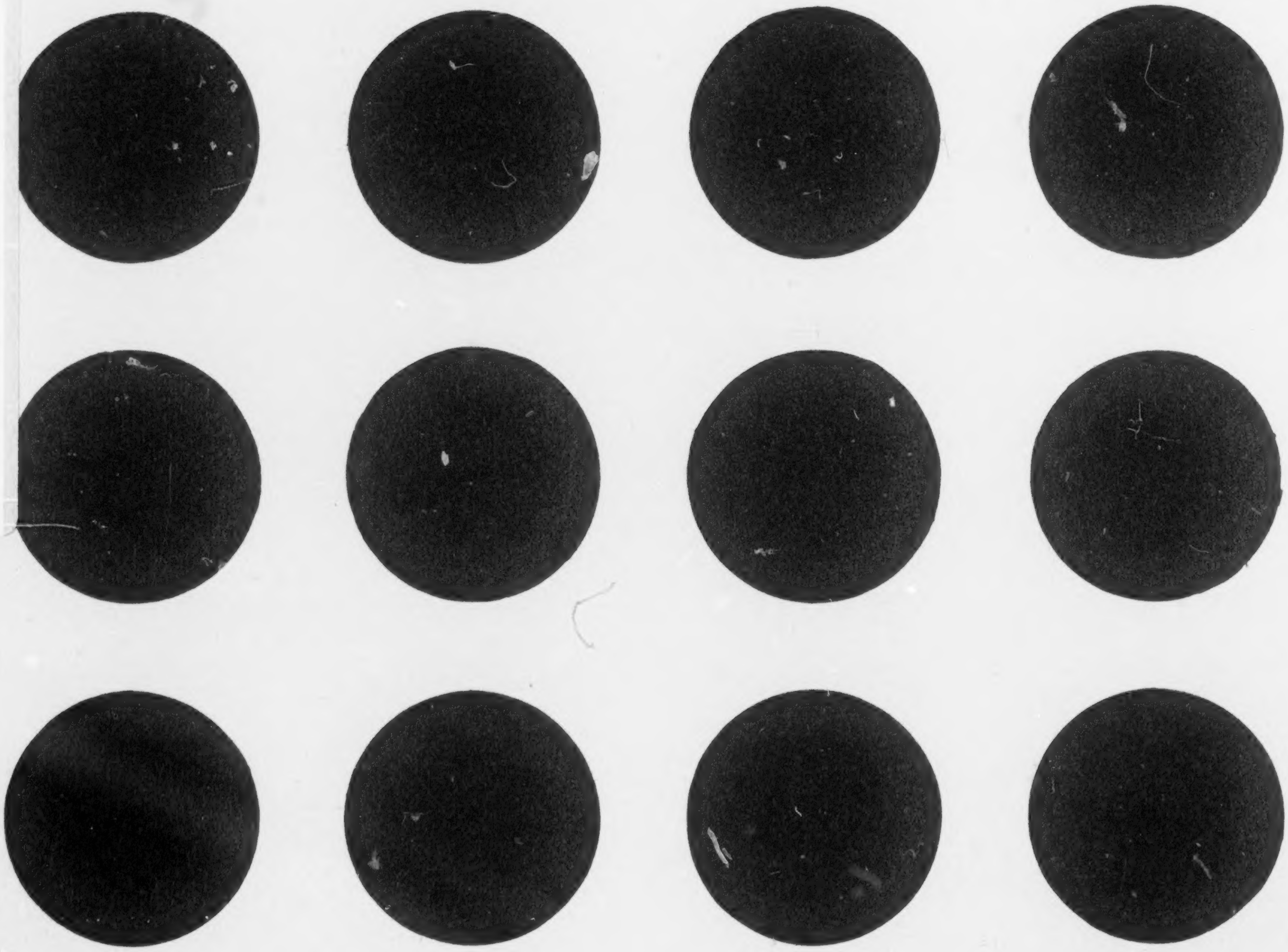

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SOCIAL SCIENCE DISCIPLINES

FUNDAMENTAL FOR CURRICULUM DEVELOPMENT

JACK P. NIX, STATE SUPERINTENDENT OF SCHOOLS / GEORGIA DEPARTMENT OF EDUCATION / ATLANTA, GEORGIA 30334 / 1971

ACKNOWLEDGMENTS

EDITOR
Dr. Jonathan C. McLendon, Chairman
Department of Social Studies Education
University of Georgia

ANTHROPOLOGY
Dr. Charles R. Berryman, Associate Professor
Department of Social Studies Education
University of Georgia

ECONOMICS
Dr. Theodore C. Boyden, Director
Center for Business and Economic Education
Professor of Economic Education
Georgia State University

GEOGRAPHY
Dr. John M. Ball, Professor
Department of Geography
Georgia State University

HISTORY
Dr. Jim B. Pearson, Professor
Department of History
University of Texas

POLITICAL SCIENCE
Dr. Marion J. Rice, Professor
Department of Social Studies Education
University of Georgia

PSYCHOLOGY
Dr. Charles R. Berryman, Associate Professor
Department of Social Studies Education
University of Georgia

SOCIOLOGY
Dr. Paul E. Kelly, Associate Head
Department of Sociology and Anthropology
Head, Department of Educational Sociology
University of Georgia

MULTIDISCIPLINARY SOCIAL SCIENCES
Dr. Jonathan C. McLendon, Chairman
Department of Social Studies Education
University of Georgia

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CURRICULUM DEVELOPMENT DIVISION
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HOW TO USE THIS PUBLICATION

Social Science Disciplines, Fundamental for Curriculum Development was designed with the curriculum developer in mind. How can he develop a structured program based on concepts, methodology, and structure of the various disciplines unless he knows the disciplines well enough to define them?

Social studies has always been plagued with too much to teach. Using concepts from each discipline in a multidisciplinary framework will provide a new and different perception for content selection.

We hope you will use this publication with curriculum development committees to help broaden the social science base in the school beyond chronological history and name-place-economic geography. Many exciting things to be learned lie buried in anthropology, economics, cultural and urban geography, historical interpretation, political behavior, human behavior, and group behavior. We can begin to uncover them, giving a sense of relevance, only as we understand the disciplines that make up the social sciences and history and incorporate learning from them into the social studies.

INTRODUCTION

In 1964, a Social Science Advisory Committee was appointed to examine the guide written in 1958-59 and to suggest revisions. This group recommended a new guide. The design of the new guide was to reflect the latest thinking about concepts, generalizations, and content selections.

The thinking of this group was published in Initial Report, Guide to the Social Sciences. The booklet has served as a framework for curriculum development in the social sciences in Georgia. It has undergone several minor revisions and contains a scope and sequence with alternates.

The State Advisory Committee felt that a section setting forth the nature of the disciplines was absolutely essential. Therefore, in 1967, the Georgia Department of Education organized a writing committee. This committee was charged with defining

(1) scope, breadth, or range of subject matter in the disciplines
(2) kinds of basic questions to which answers are sought
(3) chief methods, techniques, or procedures for investigation
(4) key concepts in the disciplines
(5) structure or general approaches in the disciplines
(6) recent trends and new emphasis.

Those persons writing the sections on each discipline followed these guidelines. Some writers naturally emphasized some items more strongly than others.

Georgia has traditionally taught social studies as separate disciplines. As late as the early 1960's some schools were purchasing two social studies books; one in history and one in geography. The original social studies guide for Georgia reflects this position. The trend, nationally, has been to teach the separate disciplines within the same content framework or as a multidisciplinary approach. The multidisciplinary section of this guide is an attempt to examine this position.

These papers have been extensively edited and rearranged after the writers completed them. We are indebted to Dr. McLendon as editor and to each of the writers for accepting this challenge and providing us with these papers. We also wish to acknowledge the assistance of Mrs. Nora Crawley in reading the papers, editing them for the criticisms of the Advisory Committee, and further refining the manuscript.

ANTHROPOLOGY

The Scope of Anthropology

Anthropology is the study of man. Man, as a species, is a primate that through natural selection is continually becoming more reliant on language and on use of tools for his continued survival. Anthropology studies man as a whole--as both a physical and social being--and as a species rather than as an individual.

Anthropology is a social science. As do other social sciences, it has a structure--a set of basic, organizing concepts and generalization--that serves as a framework for the discipline. Anthropology has a methodology, a means of collecting, organizing, and analyzing information that permits developing theories and testing them empirically or comparatively. Since anthropology is a social science, its practitioners have a commitment to scientific method; they ordinarily attempt to describe what _is_ without regard to what _should be_.

Dealing with man in his many facets, anthropology does not limit itself to political systems, economic systems, or other comparable activities of man, but is concerned with man as a whole. In contrast to other social sciences, anthropology differs from each in that it places greater emphasis on the total culture. While history is broad in scope, anthropology spans even greater periods of time. As do psychology and geography, anthropology has concern for nonsocial influences on human behavior. Anthropology and sociology appear quite closely related. They do vary, however, in anthropology's greater emphasis on the comparative approach, its outlook and its historic concerns. Until recently, anthropologists have concentrated on non-western societies and small groups rather than nations or even modern metropolitan areas.

Culture and Physical Environments. Culture is related to its geographic environment. A simplistic example is that Eskimos do not grow oranges and Floridians do not subsist on seals. Other examples are more indicative of the complexity of the interrelation of natural environment and culture. Eskimos have a quite comprehensive language as related to snow and are much more perceptive of differences in this regard than are Georgians. Similarly, Bedouins have extensive vocabularies related to camels and their accessories, while Americans use a vocabulary related to a highly developed technology. In each case, intelligence manifests in itself a cultural context.

Cultural traits also are related to other environmental factors. For example, dense population appears to lead inevitably to complex cultural patterns. Contemporary disaffection of some young adults with the bureaucratic characteristics of the American culture, and their apparent desire to eliminate contemporary institutions, is in one sense futile unless a dense population is also to be eliminated. The control of contemporary institutions is subject to change, as is the ability of these institutions to function without being highly detrimental to individuals. But Robinson Crusoe was perhaps the last man capable of "doing his own thing" (and then only until Friday appeared). Dense populations require complex cooperation; penalties for complete independence include drowning in one's own garbage. Man's biological needs are not easily satisfied within a dense population; a high level of cooperation is required.

Culture and Personality. Personality is influenced by culture. While individuals vary as a consequence of biological differentials, patterns of child raising and peer relationships along with other elements of culture influence the development of particular personality traits. Patterns of child raising tend to be consistent with patterns of the total culture. For example, anxiety producing treatment of children tends to occur in cultures in which various adult activities are anxiety producing. This is not a simple cause-effect situation but rather an associative relationship. There are also notable exceptions where certain circumstances prevail. In recent years, there has existed among the Navaho high levels of anxiety among adults which is not congruent with treatment of young Navaho children. The anxiety of the adults is situational; in reality, they have had much about which to be anxious. As yet, their child raising patterns have not changed significantly toward congruence. It is clear that many personality variations result from learning rather than biological factors. So-called middle class parents can provide security and rewards for delayed gratification; their children often adapt to delayed gratification necessary in attaining high levels of education. Less economically advantaged parents cannot readily demonstrate advantages of deferral; their children become independent relatively early. That independence may or may not be conducive to continued education.

The personality structure of any individual is by no means culture bound. There also exist biological considerations and an element of choice of the individual. But there is also a distinct tendency for a person to have personality traits that are consistent with his culture. If punishment rather than extinction is the common method of eliminating undesired behavior in a child, distrust of others appears more likely to become a personal trait. Strong repression of aggression is correlated with the frequency and extent of psychosomatic illness. Whether a given individual suffers from ulcers, however, cannot be predicted from the extent of this repression to which he has been subjected. He will respond as an individual, but the frequency of ulcers is greater within cultural groups in which aggression is strongly suppressed. Similarly, whether an individual does or does not drink alcoholic beverages is not predictable, but the probability is enhanced if that individual is a member of a cultural group in which high levels of anxiety exist. Personality varies more within groups, however, than many other cultural traits.

Biological Factors. Several biological traits combine to make man a specializing animal capable of constructing his culture. Upright posture, movable arm and hand, and good vision enable complex physical tasks. Year round sexuality and infant helplessness have almost dictated the development of family and community. The mental capacity of man, especially the ability to symbolize through language, has obvious ramifications. Man's relative freedom from instinct, which enables him to respond in a wide variety of ways, has enabled adaptation to widely varying environments. It is not possible to attribute the uniqueness of man as an animal to any one of these characteristics singly but only as they function in an interacting process.

Most anthropologists are agreed that man developed his contemporary forms over an extended period. Genetic mutations occur in animals. Those changes resulting from mutation that abet survival are genetically transmitted. Those that do not contribute to survival of the organism disappear with the death of the organism until they again reappear by chance. Most mutative changes appear to hinder survival rather than enabling an animal to better adapt; however the process of natural selection over very long spans of time can result in significant changes. Changes appear to occur most rapidly during periods of extensive geological change which necessitate greater adaptations to a new environment. The rapidity of change even during these periods is relative. As man ordinarily considers time, the pace of change is slow indeed.

Some differences among human groups clearly appear to be adaptive. Typically, desert dwellers tend to be relatively tall and lean, whereas those who have resided for long periods around the Arctic Circle tend to be short and squat. The traits of each group are adaptive to the climative environment. Man's ability to modify environment through his culture, which has become quite pronounced during the past century, has in effect reduced the importance of adaptation of this nature. It may be that resistence to chemical compounds such as pesticides could be a future basis for natural selection comparable to climatic conditions of the past.

Given the extensive influences of culture, most anthropologists are relatively more concerned with cultural influences rather than racial influences on human behavior. For example, contemporary popular opinion often holds that racial characteristics of Negroids result in their being superior players of professional baseball. This may be true, but professional baseball in America has successively had disproportionate numbers of players who were of Irish, German, and Italian descent. Baseball has been relatively equalitarian; members of disadvantaged groups typically have had access to fame and fortune in baseball earlier than in the culture at large. As each of these groups became assimilated and accepted following their immigration, the peculiar advantage offered by baseball no longer was a significant.

Further, variations within groups are so extensive as to limit the practical effects of any differences between groups that may exist. Again, Negroids in professional baseball are represented in a higher ratio than in the general population, but not all Negroids are superior to any individual member of another race. Much contemporary debate has centered on the extent to which intelligence is inherited and whether one race is superior in intelligence to any other. While it seems quite reasonable to assume that intelligence is influenced by heredity in a manner comparable to other, more visible, inhereited traits, it is also clear that there are environmental and cultural influences on development of intellectual potential. For instance, malnutrition in early childhood appears to limit intellectual potential in a manner that is irreversible. Since intelligence may at present be measured only by some test of performance and since performance has clear cultural connotations, it will probably prove difficult or impossible to determine precisely the relative importance or limitations of either heredity or culture. It is already clear, however, that variations within races are so extensive that it is not possible to generalize accurately about any individual on the basis of race.

Most people prefer the traits of their own culture to those of another. But it is limiting to one's own potential to reject as undesirable a trait simply because it is different from that in one's own culture. Assumptions of racial inferiority or superiority can become self-fulfilling prophecies when actions are based on the assumptions. Anthropology shows that what man can become is of extremely wide latitude and at least partially subject to human innovations and manipulations.

Basic Questions in Anthropology

The most fundamental questions of anthropology concern the nature of man. What is man? How did he develop? What is "human nature"? What is the potential of man? How does he change? How changeable is he? What are the basic needs of men and how are these needs satisfied? How predictable is human behavior? How are man's various behaviors interrelated? To what ends does man act? How does man regulate himself? How does language influence man? These questions suggest the areas of basic concern in anthropology.

Answers to such basic questions as these are tentative and incomplete. Man is a difficult subject to study. There are sharp limits restricting experimentation. For instance, we are unwilling to isolate completely a child at birth to observe what occurs when he has no direct contact with other humans. Man is highly complex, and many of the simpler cultures which were potential sites for careful observation have been contaminated by more complex cultures during the past half century. How man developed must be inferred since written records are non-existent.

What is known about man is necessarily tentative, subject to modification by new evidence or better theories. For example, theories of natural selection, developed prior to genetic theory, became more clearly explicable after the concept of mutation was considered and later verified. Anthropologists, as other scientists both social and physical, regard knowledge as subject to verification and elaboration.

Concise answers to these fundamental questions are impossible. Some important generalized answers appear to have validity. Man is one species, highly plastic or subject to change, but possessed of certain biological characteristics that broadly shape his behaviors. Men are more alike than dissimilar, but because they are flexible, can meet fundamental needs in a wide variety of ways. Again within broad limits, human behavior is somewhat predictable when cultural traits are known. Differences among groups are largely consequences of culture; what constitutes human nature varies among cultures. Various traits within a culture tend to be linked, and this facilitates prediction of behavior. For instance, a culture in which scientific method is valued is unlikely to also value many superstitions. What man can consider is somewhat limited by his particular language; in a sense a language is a philosophy or life style. A simple culture's language does not include much technological vocabulary reflecting a way of life in which rapid technology is neither valued nor readily facilitated. At this point, answers are perhaps not so important in themselves as is the concept that man is knowable. Anthropologists have developed methodologies that have enhanced our current knowledge of ourselves and which give promise of more substantial future knowledge.

The nature of human nature has many possible explanations. An ancient belief that sometimes still persists in modern folklore is that human nature is in the "blood." Undesirable traits of an individual are ascribed to "bad blood." The historian, if he considered the question as a suitable one for history in the first place, would probably catalog behaviors that are persistently recorded through history and develop an interpretation of human nature from what had occurred. He would also tend to consider behavior of leaders and of nations rather than people in general. The sociologist, economist, and political scientist likewise would probably not consider the broad question as relevant but would instead be concerned with human behavior in groups, economic affairs, and political actions respectively. The psychologist would deem the question as pertinent, and his basic approach would tend toward laboratory experimentation. For instance, he might describe the ability to hear sounds from 20 to 20,000 cycles per second as one characteristic of human nature. Psychologists are not restricted to laboratories, of course, but tend to favor experimentation as a method when it is practical.

The anthropologist would attempt to answer the basic question by using a series of cross cultural field studies. By comparing an element in varying cultural settings, he might conclude that variations in behavior of groups of people can be explained as differences in learned behavior, which contrasts sharply with the folklore of "blood." He could note, for instance, that need for food is a feature of human nature but that wide variations occur in what is eaten, when and how frequently, and what emotional values are attached to food. Similar studies of other variations do demonstrate that variations are learned. As a practical matter the fact that variations are learned makes a vast difference since it also theoretically enables modification of behavior patterns that the public finds undesirable.

Anthropology in the schools, limited as is the time ordinarily devoted to it, should be organized around its most basic questions to demonstrate how data are used to develop concepts and generalizations in attempts to answer the questions.

Chief Methods, Techniques, and Procedures

Physical anthropology, archeology, linguistics, and cultural anthropology also have somewhat different methods, even though they all stress comparison. Anthropometry includes techniques of measurement in physical anthropology. Man has been measured and remeasured in every known dimension, particularly skull dimensions. Early physical anthropologists sought to find relationships among various physical measures and other human traits such as intelligence and criminality. Many of their hypotheses were not verified. For example, size and shape of skull, except in gross malformation, are not accurate indicators of intelligence. The measurement of man has had quite useful payoffs in standardizing clothing sizes, determining the width of auditorium seats, and other areas in which mass production of goods necessitates their being useful to the greatest number of people possible. Interior dimensions of automobiles can be based upon measurements of a representative sample of their users. The height of a front seat may thus be established at a figure that will be comfortable for the optimum percentage of users. Either reducing or increasing the height would lower the percentage of people finding the seat comfortable. Of course, it cannot be assumed that prospective purchasers are primarily concerned with comfort; they may prefer styling that dictates a lower seat which is uncomfortable to a majority.

Comparative methods in physical anthropology include those in which early man and other closely related primates are described, often from quite limited evidence. For instance, using measurements from a few bones and his theoretical knowledge of body structure, the paleontologist can draw inferences as to characteristics of the primate. With many such individual cases and a knowledge of genetic principles, the anthropologist may trace the development of human types.

The prehistoric archeologist basically functions by uncovering a site where man lived for the purpose of attempting to reconstruct the culture. He is not concerned simply with finding objects, but with the total pattern of what is discovered. Consequently, his "dig" is carefully planned and each object he locates is plotted on a chart. An archeologist might locate a potential site in several ways. An accidental find of one object by someone might result in the hypothesis that other artifacts are nearby. Or, inferences may be drawn from prior knowledge, as in a site located because other digs in similar topography in the area had been fruitful. In some locations the archeologist is directly concerned with historic processes since a site may have several layers of artifacts dating from different periods. Often artifacts can be dated rather precisely through radioactive or chemical dating processes. Interpretation of the results of the dig is of equal importance to the artifacts discovered. Two sites that were superficially rather similar might be determined through dating techniques to be from different periods. The artifacts found might reveal that one site was the home of hunters and the other of farmers, or that one group was warlike and the other peaceful, or that one was malnourished and the other relatively prosperous. If a number of such traits could be identified, patterns of behavior of the inhabitants of the site might be inferred.

The linguist, who is concerned with language as a form of cultural behavior that is related to the total life of a people, uses field observation techniques quite extensively. He classifies vocabulary, structure, and meaning, comparing languages and dialects one with another to identify commonalities and discrepancies. Each language is a way of interpreting experience that is unique; that is, each language reflects and shapes a set of assumptions about man in his world. Linguistics can reveal subtle traits of a culture. A deity may be addressed formally as by French Catholics, informally as by French Protestants, or possessively, as by many Americans. The social class or power of a person being addressed may be perceived by the vocabulary or structure used by the speaker. Some language differences are not highly significant; it matters little whether petrol or gasoline is ordered if the speaker's desire is understood by the attendant. But the word compromise, while it has a formal definition that is common to both England and America, has an emotional tone that both reflects and shapes the two cultures. In England, a compromise is usually regarded as something gained; in America, it tends to be seen as something lost. Because of such subtle variations, the linguist must analyze language where it is used and in its context. By recording and analyzing language as it is actually used by the people, the linguist can make many inferences regarding human behavior. The point of linguistics is not simply to study language but rather to better understand a culture by analysis of its language.

A theoretical example of applied linguistic analysis perhaps best illustrates how a linguist functions since a single situation and single purpose can be clearly identified. A linguist might be asked to help predict sales of a new model automobile. He might collect language samples in dealer showrooms from people viewing the new model. By analyzing the content of the samples, he might conclude that while remarks were generally very favorable, a large proportion of the sample group considered the styling too radical for *them*; thus he might advise that the sales outlook was gloomy. He might also compare his samples with those of others concerned with a competitive model. Linguistic analysis is rarely so simple or straightforward as the example, but the collection and analysis of language samples is analogous, as is the comparison of two sets of samples. But the linguist is not ordinarily concerned with immediate economic influences.

The cultural anthropologist, concerned extensively with ethnology, the comparative study of people, and with cultural processes, also uses field study and observation. At a given time a particular cultural anthropologist might be concerned with the transition from childhood to adult status within a particular cultural group. Living among the group for an extended period, he would observe behaviors of that age group, discuss the behaviors with many members of the cultural group, and observe the extent of congruity between adolescent behavior patterns and various other patterns within the culture. He might observe that, among many behavioral patterns in the culture, some adolescents from the total group both had sharply restricted upward mobility and a high level of frustration which was manifested in aggression. He might then hypothesize that the two traits were interrelated, and compare the group with other cultural groups to determine whether such interrelations typically exist in those groups in which upward mobility of some is restricted. Again, the example is highly simplified by isolating the two traits mentioned. In reality, the cultural anthropologist must consider the entire complex of traits which he observes.

In some instances the cultural anthropologist may identify a relatively small number of individuals who appear to be ideal types. Ideal in this context does not suggest superiority but rather representation of a category. These few individuals might be studied intensively as typical cases, as for example, they might represent the experiences of many who had very suddenly moved from a simple agricultural culture into a modern urban one. In such an example, the anthropologist might be concerned with the concept of culture shock and might learn most in a situation in which a few informants were studied at great length and in high detail.

In such cases, the anthropologist would still be concerned with describing human behavior accurately, comparing one group with another, and with formulating and validating theory. It may be that the cultural anthropologist personally rejects the behavior that he describes or believes that certain cultural patterns have undesirable consequences. Because he analyzes a culture and understands how people within it function, he does not necessarily approve of it. While at work he must attempt to be sufficiently objective to report and analyze accurately.

To better share the knowledge cultural anthropologists have gained from field observations and to facilitiate cross-cultural comparisons, Human Relations Area files have been established.* An indexing system permits easy location of topical data from cultures throughout the world. For example, the cultural anthropologist might be interested in determining what factors are associated with alcoholism. He might hypothesize that alcoholism is infrequent in individuals among groups that have strong objections to alcohol. He could compare from the indexed data frequency of alcoholism among groups that object to alcohol with those that permit adolescents to consume alcohol as a matter of course. He could, at least in theory, study each culture in that field himself, but time considerations would make this more difficult than relying on data already acquired and indexed.

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*Source: Yale University Library, New Haven, Connecticut. Available on microfiche at major libraries.

Teaching of anthropology should give sufficient attention to research methods so as to demonstrate that anthropological findings are not simply unsupported opinion.

Concepts and Generalizations

The structure of any academic discipline consists of its basic organizing concepts and generalizations and its frame of reference or way of viewing its data. Space precludes including all relevant concepts and generalizations and thorough discussion of any of them; some of those ordinarily considered more fundamental are selected.

Cultural Characteristics. Culture is the total way of life of a group, that part of the environment that is man made. It constitutes a way of thinking, feeling, behaving, and communicating. Some examples of cultural traits for a given individual might include speaking English, attending religious rites on Saturday, having only one spouse at a time, desiring a new auto when the old one is serviceable, earning one's subsistence by using a tool that costs $10,000,000, and organizing formal dances for a twelve-year-old.

Cultural Universals are those generalized cultural traits that appear in all groups. Universal traits form a valid concept only in a very broad sense. Every group has ways of subsisting, a language, and patterns of social organization. There are many particular ways of responding, obviously. Each cultural group invents or has diffused to it ways of behaving that it perceives as more or less satisfactory for that group. Culture is learned, whether formally, informally or both by enculturation (within one's cultural group) or acculturation (from another cultural group).

Change. Any cultural practice that is not functional disappears. The function that a particular practice serves is not always obvious or logical to some observers, however. A cultural trait that appears to be inexplicable is simply not understood. Rates of change can vary widely, yet significant cultural traits tend to be persistent.

Integration. Various parts of the culture are interrelated. One aspect of the culture does not exist independent of or unrelated to other aspects. In modern American culture, it is assumed that it is possible for man to know about the world. This assumption underlies science and is linked with the wide variety of innovations that science produces. The same assumption leads indirectly to rapid cultural change. In some other groups, there is a basic assumption that man accepts what occurs. This trait is linked with a low level of technological traits, and a culture with this basic assumption tends to be relatively slow to change.

Culture and biological characteristics are interrelated. Neither is solely deterministic. For instance, it is biologically necessary for man to eat. What he eats (within some biological limits), when he eats, and the rituals that go with eating are cultural.

Cultural patterns also are interrelated. Widespread ownership of automobiles in this country has been a factor in modifying adolescent behavior, the development of suburbs, acquisition of status, and pollution of the air. Prohibition was intended simply to banish strong drink. Perhaps the most tangible result, however, was the development of organized crime as one of our bigger businesses.

Trait Classifications. Cultural traits may be classified as material and non-material. A material cultural trait has physical existence, such as a tool. Non-material traits include those such as language or beliefs. Cultural traits may be classified as overt or covert. Overt language patterns may be directly observed, as may be participation in particular events. A covert trait, such as a fear or belief, can sometimes be inferred only from other behavior. Cultural traits may also be explicit or implicit. In various respects, many people are aware of and can describe their actions or other cultural traits. But in numerous routine activities people are trait unconscious. Applause following an eulogy is deemed inappropriate because "it just isn't done."

Adaptation. Cultural traits can facilitate adaptation to the world about us, whether to natural phenomena or to other cultural traits. Irrigation, aspirin, parking meters, and seat belts are examples of adaptive cultural traits to meet various kinds of threats, drives, or motivations. Adjustive cultural traits may vary widely among cultures. Giving away one's material goods may bring a high level of self-satisfaction in one culture; modern Americans tend to seek acquisition instead, and rare is the American individual who disposes of practically all of his wordly goods. Adjustment is an especially human characteristic.

No culture is perfectly adaptative or adjustive; stress always remains. Stress may be deliberately produced as a cultural trait. Stress is not undesirable in itself; it is a desirable stimulant within reasonable bounds. Beyond those limits, it can be highly detrimental. Contrary to popular opinion, high levels of stress are not limited to modern, urban, technological cultures. Simplex cultures abound with examples of high levels of stress that were associated with traits such as witchcraft, severe punishment for deviation from acceptable patterns of behavior, or high death rates resulting from low levels of technology and production.

Cultural Persistence. Cultural traits tend to persist, although in somewhat modified forms. The adversary system in law which assumes that truth will come out when two parties contest in court is basic to our legal system. Most divorce cases are not contested but are in fact agreements between the parties involved. Legally, however, one partner is found at fault and the other is granted the divorce.

This example also illustrates some of the reasons why a cultural trait tends to persist. A consent agreement without contesting parties being represented by attorneys would be economically detrimental to attorneys who specialize in divorce law. Various areas of law are culturally linked; there is an understandable concern that abandonment of adversary proceedings in such cases might ultimately lead to destruction of the entire system. Although the adversary system may present some problems, most modern Americans consider it preferable to such ways of determining guilt as torture, force, or physical prowess.

Other reasons for persistence include early learning of a cultural trait. In the American culture, which permits a relatively high degree of upward mobility, those who are upwardly mobile quite often change their church affiliation, take up golf, and possess material goods consistent with their status. Language patterns are somewhat more difficult to change, and when changed, the new patterns are often detectable as new because they are overly precise, as a strong accent on *ment* or *ing* suffixes. Even less likely to change are patterns of child raising. Parents tend to deal with children as they were dealt with as children.

Cultural traits that have a traditional or religious sanction also tend to be unusually persistent. Such traits tend to be considered "good" in and of themselves, and over time may become only symbolic. In some areas it is not unusual to see a state policeman patrolling in an air-conditioned, sleek cruiser, slouching in his seat to make room for a hat that was designed to shed sun and rain. As a symbol, however, his hat enables him to be instantly identifiable. In some cases, traditional ways of behavior may have a utility not readily apparent or even intended.

Cultural Change. Even persistent cultural traits tend to be subject to change through drift. Transmission of cultural traits from one generation to the next tends to be imperfect, and small variations occur. Language is a prime example. The misspelling or pronounciation, "relevant" (sic) has become almost as frequent.

American attitudes and values (cultural traits in themselves) tend to favor changes in the material culture, but they are somewhat more resistant to non-material changes. "New" is a favorite adjective in product advertising in America; newness is somewhat less valued in non-materialistic cultures. However, since cultural traits are linked, changes in material traits often result in unplanned non-material trait changes. Television has produced significant changes in patterns of family living and in the learning of children. Especially in the latter instance, little is known of the effects or desirability of the non-material changes.

Diffusion is the process by which cultural traits are transmitted from one group to another. Diffusion may be, and in the past usually was, unplanned. Agriculture apparently spread from southwestern Asia, the potato from South America. Non-material traits, such as language, also may diffuse. The English language was widely diffused by English colonialism. A cultural trait may be invented more than once, however. The appearance of a single trait in two or more locations does not necessarily indicate that diffusion occurred. Diffusion may also be planned and deliberate. Many American products have been diffused throughout the world as a consequence of deliberate diffusion by their manufacturers.

Cultural Lag is the tendency of one cultural trait to change more slowly than another with which it is linked or integrated. For instance, in contemporary America, production and use of automobiles and airplanes consistently outstrip production of roads and airports, which lags behind needs. It seems probable that traits comparing the desirability of public spending to private spending are related to this lag.

Race. The process of change occurring among geographically or socially isolated people has through extensive inbreeding come to differentiate some groups from others in several respects. These physical characteristics and the genes that reproduce them constitute the bases of different races. Only those characteristics that are transmitted genetically influence racial type. Historically, there has been much confusion between racial groups and ethnic groups.

Among the physical characteristics related to race are skin color, hair texture, frequency of blood type, and facial forms. Anthropologists are not agreed as to the number of races. Four are readily observable in physical traits among groups, six basic patterns may be detected when considering frequency of blood type, and it is possible if one is so inclined to create one's own arbitrary classification system. In practice, racial designations are in fact arbitrary. In Latin America, for example, hybrids who speak the native language and wear traditional clothing are classified as Indians, while similar people who speak Spanish and who have adopted other patterns of Spanish influenced culture are not considered to be Indians. In this country, hybrids known to be partially Negroid are ordinarily socially classified as Negroid.

Structure of Anthropology

The simplest structure of anthropology is a division into physical and cultural components. However, further division to classify four basic areas seems to aid clarity. Pre-historic archeology and linguistics are the additional two categories. Archeology can have both physical and cultural concerns. Linguistics is actually a study of one part of the culture, but is so specialized that it seems to merit separate consideration.

Physical anthropology has as its primary aim the understanding of man as a physical being. Genetics, including inherent limitations and potentialities, is one subdivision of physical anthropology. The study of racial similarities and variations and the mythologies which have developed about the concept of race is another. Comparative anatomy, the similarities and differences between man and various other species, is a third. Anthropometry, a branch of physical anthropology, measures and analyzes human and animal physical characteristics. Evolution traces the development of man.

Pre-historic archeology concentrates upon the development of man as a human, working backward in time from the point at which written records become available. The interrelationship of the basic areas of concern is clearly obvious; for example, both the physical anthropologist and the archeologist are concerned with the physical development of man in prehistoric periods.

Linguistics is the study of language as a communications system. Language is regarded by the linguist as a system of sounds that have significance for those using them. Each language consists of a selection from the basic sounds of which man is capable and the arbitrary assignment of meaning to various combinations of these sounds. Language is a continually changing system. Selecting linguistics as one of four basic areas of anthropology in order to explain its scope does not imply that language is not a part of culture. To the contrary, it is a significant and influential part. Linguistics includes among its branches both descriptive and analytic components. Philosophy of language is another subdivision.

Cultural anthropology is the fourth basic area, and perhaps the central area. It is the systematic study of the entire range of human behavior. Culture therefore refers to a total way of life, including such factors as social institutions and relationships, ways of subsisting, including use of tools and equipment, language, and the influence of culture on personality. The interrelationships of various parts of culture are of concern, as are the ways culture is transmitted laterally and over time. The ways culture changes are also of particular interest. Some of the branches of cultural anthropology thus include ethnology, ethnography, cultural change, culture and personality, belief systems, and ethnomosicology. Cultural anthropology may also be structured into area studies, as the culture of South American Indians or Eskimo culture.

Various anthropologists might select other classifications or basic areas. The selection of four here is simply one way of viewing the structure of anthropology. Culture and personality might well be regarded as fundamental; prehistoric archeology could be considered to be within the scope of cultural anthropology, as could linguistics. Ethnography, the collection of data in an existing culture. also could be deemed a separate area. The point is simply that any classification of anthropology is arbitrary and does not suggest that the discipline is unconcerned with any aspect of the study of man. Structure of anthropology may be readily expanded by considering fundamental concepts and generalizations as a part of structure. Applied anthropology might also be considered a structural component by some practitioners. Other possible components include the combination of anthropology with some other discipline such as anthropology and education, in which the principles of anthropology are related to the second discipline.

Trends of Anthropology

Assuming that the methodology of anthropology continues not to be experimental in most instances, it appears that anthropology will not change dramatically during the next several years. Changes in anthropology tend to be more evolutionary than revolutionary, since a dramatic breakthrough in methodology is less likely than in disciplines that utilize experimental methods. Anthropology does respond to the culture in which it exists, so emphases shift with the times. Methods are continually refined, and applications of anthropology to practical problems are becoming more frequent.

One important shift in emphasis has been towards the study of man in more complex cultures. As previously noted, there has been much concern with recording data from simple cultures while they still existed. While these simpler cultures continue to be of interest, especially in regard to the effects of rapid change, complex cultures presently have extremely pressing problems. The need to study these problems is attracting anthropologists.

Another area of concern is refinement of anthropological method, and a trend toward more care and precision in field studies has been seen. That is, a shift from the humanities toward behavioral science has become somewhat more pronounced. Involved in the change are such refinements as paying more attention to how representative a sample of behavior is obtained, more use of test instruments, and less reliance on unsystematic observation.

The refinements illustrated above also imply an increasing emphasis on interdisciplinary study of man involving other specialists such as psychologists and geneticists. Interdisciplinary studies that attempt to produce more unified theories of human behavior explaining how man becomes man in his culture have gained increasing favor.

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ECONOMICS

Economics is the study of how people satisfy their wants with their resources. People usually do not use basic resources directly in satisfying their wants. Rather, they use such resources in distribution of income as well as in the production, exchange, and consumption of goods and services. Thus this study must encompass the total economic process in terms of the subprocesses of production, exchange, consumption, and income distribution

Scope

The total process is made tremendously complex by the simple fact that people's wants tend to be much greater than can be satisfied by available resources, so resources relative to wants are scarce. It is the study of this scarcity and attempts to overcome it that is the focus of economics.

Economic scarcity forces concern with economizing (economic efficiency), that is, the best allocation of scarce productive resources in relation to the best choices of the many goods and services that might satisfy the most important wants. Economizing requires a continuous series of decisions or choices.

Economics concerns decision-making in resource use, including recognition of the social problems and goals to which some economic decisions relate. Economists pose alternative solutions and try to identify the most appropriate course or courses of action to attain economic efficiency.

Economics does not limit itself to description but goes on to analyze economic activities and to explain these activities--to tell how economic activities occur, why they occur, the significance of their occurring, their predictable consequences, and ways of controlling them.

The scope of economics overlaps several other social sciences. Economic activities involve individuals and groups of individuals in a material world within a framework of social institutions. Certain aspects of such institutions and organizations as labor unions, businesses, government and others are of interest to economists as well as sociologists. Mutual interest in technology relates economics and anthropology. Economics involves conflicts among individuals and groups that can be settled or modified only in the political arena, thus bringing the economist into contact with political science. In studying the forces of economic demand and supply in the production, exchange, distribution, and consumption of goods and services, the economist comes upon behavioral forces that lead him to psychology. The physical environment influences economic production, exchange, distribution, and consumption. The importance of spatial relationships, for example, in economic activities reflects the closeness of geography and economics. Intere t in economic forces in the past leads some economists into history and some historians into economics. Personal economic motives have swayed the minds and actions of mankind throughout history. If properly understood, history can serve as a guide to avoiding mistakes that have already been made.

Economics makes extensive use also of mathematics. The subject matter of economics lends itself well to quantification, and what can be quantified can be explored by the powerful tools of analysis developed by mathematicians. In addition, mathematics helps the economist derive principles, laws, or generalizations from observations and also derive additional laws, principles, or generalizations from those already formulated.

Basic Questions in Economics

The fundamental question to be answered by economics is how to cope with scarcity--the scarcity of resources in relation to wants. A number of other questions stem from the fundamental question.

How scarce are our resources and how valuable are they? Resources are scarce and of value only in relation to the goods and services produced or the wants the resources may directly satisfy. And these goods and services are of value only in relation to the effective demand for them. The prices that are placed upon goods and services indicate their relative scarcity and value and serve as rates of exchange for resources and products.

Who makes the decisions as to what and how much to produce and how are these decisions made? In a market system individuals or groups of individuals makes the decisions as to what types of goods and services are produced and how much of each will be made. In a free market the forces of demand and supply determine prices which in turn determine the item and the quantity of production. In a traditional economy these decisions are made by custom; in a command economy they are made by authority.

How are resources used in the production of goods? In a market economy decisions about what resources to use and in what proportions to use them also are made by the interplay of the forces of supply and demand. As demand for a resource increases relative to supply, there is a tendency to shift from the use of that resource to the use of another. That is, as one type of resource becomes scarce relative to another, there is a shift from the use of the former to the use of the latter.

How are goods and services obtained more by some persons and less by others? How are they made available to those who need or want them? Economists refer to this area of inquiry as the question of income distribution and study it in terms of decisions made variously by tradition, command, and the market systems. As the American economy is basically a market system, American economists devote most of their efforts to a study of the economic market place where income distribution is determined.

How much in total can be produced and will be produced? The amount of resources and the manner in which they are used put limits upon the total that can be produced. As more resources becomes available and used more efficiently, more can be produced. As effective demand is increased, production will rise to a point beyond which no more can be produced without changes in resources or technology or both.

How fast will an economy grow? Growth depends on the amounts and qualities of resources devoted to the productive system and on the improvement in and use of technology. Decisions on growth are made like other economic decisions, by command, by tradition, and by the market. In any system, growth when an economy is at full employment can come about only by curtailing immediate consumption and increasing plant and equipment or by improving technology.

How is money used to facilitiate the exchange of resources, goods, and services? The direct exchange of resources, goods, and services through barter is a very cumbersome process. The chances of buyers and sellers at any time or place making offerings that would result in exchange are very slight. Fortunately, money has been created and when widely accepted helps to overcome the awkward conditions of time, place, and balancing of offers and bids that barter entails.

Other important economic questions concern such problems as market imperfections, unemployment, inflation, the role of government, what kind of a system does man need to reach such basic desires as freedom from fear and poverty, and such goals as society may fix from time to time. All this may be summarized by saying that economics asks these questions.

What goods and services are being produced?

How are they being produced?

How are they allocated among people?

How efficiently are our resources being used?

How fully are our resources being used?

Is our capacity to produce growing?

Chief Methods, Techniques, or Procedures of Investigation

A chief method of investigation in economics is model or theory building, which simplifies reality. Models may be expressed verbally, graphically, or mathematically. Much more deductive than inductive, model building involves the selection of premises (assumptions, postulates) and the deduction of conclusions (theorems, implications) from those premises. Deduction usually uses Aristotilian syllogisms composed of categorical, hypothetical, alternative, or disjunctive propositions.

Lipsey and Steiner define theory in their text, Economics. "A theory consists of (1) a set of definitions that states clearly what we mean by various terms, (2) a set of assumptions that defines the conditions under which the theory is to apply, and (3) one or more hypotheses about the way in which the world behaves. Hypotheses may be simple assertions or they may be logical deductions from the assumptions. In the former case, we sometimes refer to them as assumptions; in the latter case, we refer to them as implications. The implications that are deduced from the assumptions can be tested against actual empirical observations and we can then conclude either that the theory is consistent or inconsistent with the facts."

Inductive methods are used to determine whether the premises and conclusions of the model are true. Induction involves observation of particulars in real economic activities. If one or more of the premises is not true, other premises may be investigated and if found both true and relevant may replace the untrue premise(s). The new conclusion is again checked against evidence for truth or untruth.

A main goal of inquiry is the discovery of meaningful relationships within a discipline. Relationships are the connections among variables and are sought to enable the economist to understand, explain, predict, and possibly identify means of control of the world of reality. If there is a relationship among two or more variables in the sense that they may depend upon each other, it may be said one variable is a function of others. It is then the object of the economist to find out exactly what the function or relationship is and, hopefully, to discover causal relationships. Since it is difficult to deal with multiple relationships, the economist often makes an assumption that (for his study at a particular moment) all variables, except the two he has selected for study, remain constant or at least have no significant influence on the two. In popular language one says, "All other things remaining the same."

Economists spend a great deal of their time on inductively examining evidence to form descriptions and measurements, as well as to test hypotheses. Having no special methods of his own, the economist uses various social science research methods such as the source method of history, the regional analysis of geography, opinion polling, sample surveying, interviewing, content analysis, simulation of decision making, statistical methods, linear programming, gaming, input-output analysis, and mathematical logic.

Of central importance in economic reasoning are the analytical "tools" of functionalism, equilibrium, maximization, and marginalism. These tools are considered here as fundamental concepts.

Key Economic Concepts

Functionalism is the practice of emphasizing operational or functional relationships, such as the relationship between the quantity demanded of an item and its price or between the quantity supplied of an item and an item's price. But of even greater importance is the relationship between the two functions--demand and supply--termed market price. Both demand and supply are forces in the market place reacting against each other and tending towards a balance of themselves. This tendency towards balance is termed equilibrium.

To economize is to get as much want satisfaction as possible. This means we maximize satisfaction. This act of maximization may take many forms, but of most interest is consumer behavior in maximizing satisfaction in consumption and business behavior in maximizing profit in production. Maximization is closely related to equilibrium, for as consumers and producers maximize their interests their actions tend toward equilibrium where price is determined. The range of economic possibilities is so limitless that it would be almost impossible and quite unnecessary to deal with all of them. Therefore the economist starts with what is and asks himself, "What would happen if we made changes from what is now?" This means he is looking at the "margin" of phenomena, which is much easier analysis than would be true of all reality.

Marginal revenue is the change in total revenue per unit change in the quantity sold. Marginal cost is the change in total cost per unit change in output. The marginal product of a factor of production is the change in total output per unit change of input of the factor.

One form of aggregative analysis is monetary and is expressed as total demand (the quantity of money times its velocity) equals the total supply (the price level times the amount of goods and services produced and sold.) The equation depends on logic and cannot be tested for its validity. However it is very useful in noting relevant variables in macroeconomics and their relationship to each other. It is a guide to the use of monetary policy in determining aggregate output, employment, and prices.

The Keynesian system of aggregative analysis involves two basic equations derived logically. They state that national income equals total consumption and saving or total consumption and investment; therefore, savings equal investment. Consumption is a function of income and that function says that beyond a point we save part rather than spend all of any addition to our income. The Keynesian multiplier principle says that a change in investment leads to an even greater change in income (multiplying rather than merely adding an amount). The same principle applies also to a change in consumption or governmental expenditures.

Structure of Economics

The term "structure" has several meanings, among which are (1) classification without continuity, (2) classification with continuity, and (3) the central and fundamental ideas that explain and delimit a discipline, without or with its methods.

(1) Classification without continuity would be the consideration of a discipline in terms of its (a) subject matter, (b) methods, (c) goals, such as knowledge, and (d) its practitioners.

(2) Classification with continuity would be the consideration of a discipline in terms of (a) macro-microeconomics, (b) principles-policy, (c) central ideas-problems, (d) aggregate-sectoral, (e) real-monetary connections and contrasts, and (f) economics-economic history-economic geography-econometrics-location theory-etc.

The central and fundamental ideas that explain and delimit economics have been summarized recently by such leaders in economics education as Lawrence Senesh, Meno Lovenstein, Robert Darcy, and John Maher. Comments by each of these economists follow.

Senesh writes in Concepts and Structure in the New Social Science Curricula.

> The central idea of economics is the scarcity concept, namely, that every society faces a conflict between unlimited wants and limited resources.
>
> Out of the scarcity concept a family of ideas emerge. Because of scarcity, man has tried to develop methods to produce more in less time, or more with less material and in shorter time. Various types of specialization were discovered in order to overcome the conflict between unlimited wants and limited resources. We specialize geographically, occupationally, and technologically. The third family of ideas grows out of specialization.
>
> Because of specialization, we are interdependent; interdependence necessitates a monetary system and a transportation system. The fourth idea emerges from the first, scarcity, and from interdependence.
>
> Men had to discover an allocating mechanism and this is the market, where through the interaction of buyers and sellers price changes occur. Prices determine the pattern of production, the method of production, income distribution and the level of spending and saving, which, in turn, decide the level of total economic activity. The fifth family of ideas grows out of the fact that the economic system is a part of political society. The market decision is modified by public policies, carried out by the government, to assure welfare objectives. These welfare objectives are determined in the United States through the political interaction of 200 million people which generates thousands of welfare objectives which I have reduced to five: our attempts to accelerate growth, to promote stability, to assure economic security, to promote economic freedom, and to promote economic justice.

Lovenstein in Economics, Teacher's Guide states the following.

> By the structure of economics is meant: (1) the division of the subject into its major categories and (2) the basic analytical themes which run through the entire subject. Economics may be divided into three groups of ideas:

> (1) Scarcity and basic economic decisions; (2) The flow of goods and services and the flow of money; and (3) The coordination of economic activity. The basic analytical themes are: (1) Marginal analysis and (2) Institutions. The structure of economics may then be thought of as a grid (categories as columns and themes as rows).

In the National Association of Secondary School Principals Bulletin (November 1965), Darcy conceives of economics as the study of how society organizes to develop and use its relatively scarce resources of labor, capital, and land to satisfy human wants. There is interaction of three basic sets of forces: resources, technology, and institutions. There are five basic models in economics: (1) The interacting forces of resources, technology, and institutions, (2) Circular flow of economic activity, (3) Production-possibilities curve, (4) Supply and demand curves determining equilibrium price, and (5) Aggregate demand and supply curves.

Maher in What Is Economics? proposes the following.

1. Categorization
   Resources, production, outputs, consumption, and objectives (satisfactions).

2. Identification of relationships
   Price relationships among outputs and resources. Substitution relationships among resources in production and among outputs in consumption.

3. Combining categories and relationships into systems
   Attaining the "optimal" operation of a system requires a guiding criterion of performance.

4. The whole economy as a single system.

Recent Trends and New Emphases in Economics

One of the most important recent emphases in economics has been the emphasis on macroeconomics--the study of large aggregates within an economic system, such as the total output of goods and services, the total number of jobs available, the total number of unemployed, the total stock of money, the general price level, the level of business activity, and other total (aggregate) concepts. In comparison, microeconomics focuses on the individual decisions of persons, businesses, industries, and on specific prices.

Macroeconomics is concerned with the total of decisions to spend or not to spend, to invest or not, to tax or not, and their effects on employment, production, income, and prices. Economists no longer generally assume that aggregate decisions left to themselves will always provide full employment and economic stability. Modern economics discounts Say's law which held that production automatically produced sufficient demand to keep the economy on an even and high level of employment. Macroeconomics emphasizes that the economy may not operate at its potential and there may be serious gaps between what the economy could do and what it actually does do--a gap between potential GNP and actual GNP.

Economists now look upon the economic process in terms of the main flows of consumer expenditures, business investment, expenditures, and government expenditures as making up total demand and determining total national output. Economists suggest that consumer spending is largely passive and that business investment depends upon many different factors, and both may be difficult to control.

On the other hand government expenditures (and income) are more amenable to control. Congress itself in the Employment Act of 1946 declared "that it is the continuing policy and responsibility of the Federal Government to use all practicable means.....to coordinate and utilize all its plans, functions, and resources for the purpose of creating and maintaining, in a manner calculated to foster and promote free competitive enterprise and the general welfare, conditions under which there will be afforded useful employment opportunities...and to promote maximum employment, production, and purchasing power."

With this declaration of policy behind them, governmental officials have developed both monetary and fiscal policies to carry out the declaration as effectively as possible. Economists have devoted much of their effort to the study of the potential and actual effects of both monetary and fiscal actions, separately and together. More and more attention has been given to a proper balancing among the sometimes conflicting goals of maximum employment, production, and stable purchasing power. Economists are much concerned that maximizing employment may lead to decreasing purchasing power. They are concerned with the question, "Can we have full employment with price stability?" and they tend to believe the answer is "no."

Although economists are concerned with growth and stability, along with other economic goals, until recently they have tended to slight the goals of economic freedom and justice. Current political considerations may bring these goals back into the front ranks of economic policy making.

Classical economists, such as Adam Smith, said that competition made the enterprise system operate to the benefit of public welfare, but was susceptible to destruction by the enterprisers themselves. However, the classicists tended to be more optimistic on competition's continued and effective viability than many economists are now. Today there is widespread doubt that competition can do its job in our economy. Economist John Kenneth Galbraith suggests in one book that "countervailing power" will save the competitive market system and a later book seems to say that the market is being replaced by corporate planned decisions on the "what, how, and for whom" economic questions. The matter remains unsettled.

Another interesting new emphasis in economics has been the structuring of systems into the categories of tradition, command, and market. This structuring has been very useful in bringing about the understanding of both historical and contemporary economic systems. Similarly, the structuring of economic growth into stages of development by economic historian Walt Rostow has aided Americans in grasping the problems facing nations much less developed than our own.

With a greater awareness of economics, major economic groups have taken on greater economic responsibilities. The government has not only concerned itself with aggregate aspects of the economy such as employment and price stability, but is providing an ever increasing minimum level of support for individual welfare. At the same time, private business and organized labor have taken constructive steps, often in cooperation with government, in support of education, housing, job training, and job creation. Closely associated with these steps have been cooperative regional programs such as Appalachia, and programs in urban affairs such as transportation studies and their implementation.

Economics in recent years has received a tremendous amount of help from the substantial increase in the collection of economic data and its processing by high speed computers. These computers are a necessity in the recent emphases on input-output analysis and game theory. At the same time the qualit of the new data has been greatly improved with the refinement of survey techniques. These developments have led to a great increase in economic forecasting and the use of such forecasting by business, labor, and government. Forecasting has introduced a form of economic planning that could go a long way in meeting some of the nation's persistent economic problems of employment, growth, and stability.

Probably the most important outcome of these tremendous statistical efforts has been the development and refinement of a system of accounting for the whole economy--what all people produce, spend, save, invest, etc.--known as the national income accounting system: Gross National Product, Net National Product, National Income, Personal Income, Disposable Income, etc.

Other new emphases have centered on underdeveloped countries: low per capita income, difficulties in applying western technology and in accumulating capital, exploding populations, and controversies over the role of foreign aid; and also centered on the problems of affluence: growth and poverty, growth and the quality of life, and the relationships of the state, the private individual, and the public. Economists are contributing to an awakened interest in these problems and their solutions.

Finally, there has been a remarkable increase in attempts to bring order and stability to a rather chaotic and precarious international monetary system. Central banks of the free world nations are learning to act together and take steps to help each other out in times of crises. And there are significant attempts being made to reform and improve international monetary arrangements to bring about stability and expansion of international economic activities.

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GEOGRAPHY

Trends in Geography

The impression commonly held of geography dates from its earlier stages in this country. At the university level, however, there has been much change in the discipline. At the beginning of the century the subject was primarily earth science and most geographers were trained in geology. By the second decade the human element was introduced, but without changing the approach inherited from geology. That is, geographers were seeking cause and effect relationships where the physical elements were assumed to provide the principal stimulus to which man reacted. Remnants of this period have persisted to the present day, but the viewpoint according to one writer, "...practically overpowered American professional goegraphy in the first generation of its history." An interest in regions and the regional approach advanced in the 1930's, and in the 1940's geography came to be viewed as the study of similarities and differences under the banner of areal differentiation.

Three important changes occurred in the 1950's. One of these was a decline of interest in regional geography with a compensating increase in systematic or topical geography. A second important change was the development by geographers of statistical techniques and their application to geographical problems. The result of these two changes gave rise to a third which set the stage for the 1960's. Geographers have traditionally been interested in the spatial dimension, but most of their early concern was for facts and descriptions, with only limited attention given to analysis. With the introduction of statistics in geography the tools became available, making it easier to focus on the analysis of various phenomena distributed over space, and thus the era of spatial analysis made its appearance. This is probably the principal new direction that became firmly developed during the decade of the sixties.

It should be added that each of the earlier stages was not abandoned when a new one appeared. Topics have persisted once they became entrenched in the discipline, and usually remained long after others were adopted. For example, environmental determinism, a central theme of geography during the second and third decades of the century, still exists today, even though it has lost credibility among geographers. Other topics, such as the focus on regions or areal differentiation, are still present in American geography, though not enjoying the popularity they once had. Furthermore, it should be added that the 1960's did not see complete agreement on spatial analysis as the principal focus for the subject. Some geographers have suggested that the discipline is destined to become a behavioral science, and believe that a psychological dimension must be added and attention given to the whole range of possibilities relating to perception (spatial perception, environmental perception, social perception and others) since people make decisions on how they perceive the facts, not necessarily how they actually are. It would be difficult to predict exactly what the principal focus of geography will be by the end of the 1970's, but judging from past experience there is little doubt that it will be different from what it was at the end of the 1960's.

A different, but significant trend relates to geographic education. The 1960's were particularly important since that was the decade when some of the people involved in new and developing ideas in geography increased their dialogue with scholars who were developing new contributions to learning theory and teaching strategies. The joining of these two components gave rise to a new thrust in geographic education, which found its initial expression in the

High School Geography Project and which later appeared at the elementary school level in the work of the Geography Curriculum Project at the University of Washington.* From the examples provided by these projects, it is evident that geographic materials and instruction may take quite a new turn in the 1970's.

Scope of Geography

The social sciences are all related in that each focuses primarily on some phase or subdivision of human activity. All are concerned with attempting to understand and explain human actions. Geography is similar to the other social sciences in the data and research techniques used. The principal differences are that the geographer focuses on unique concepts, raises distinctive questions, and is the only one of the social scientists who concentrates primarily on spatial relations as they relate to human activity.

In at least one sense, however, there is no such thing as a geographical fact. Facts are facts, and classifying them does not strengthen their importance or credibility. For example, the location of Philadelphia is 40° North Latitude and 75° West Longitude; the population of Indonesia is about 115,000,000; the average annual precipitation of New Orleans is 57 inches; the capitol of France is Paris. All of these might be accepted as facts, but there is nothing peculiarly geographical about them. These same facts may be at least as useful in some other disciplines and can scarcely be said, then, to "belong" to geography.

Basic Questions in Geography

It has been suggested that geography be viewed as "...a method of inquiry and a manner of knowing." Geographers are perhaps best distinguished by the kinds of questions they ask and the methods used for finding answers. What then are the kinds of questions that geographers might ask about such problems or topics as those listed above? Surely some of the following would be included.

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*See, for example, the entire May 1969 issue of the Journal of Geography or Social Education.

1. Where is it? Depending on the problem at hand, this question may involve three parts: (a) what is the specific or absolute location, if we are dealing with a single phenomenon; (b) what is its relative location, that is, what is its location in relation to other places; and (c) what is its pattern or distribution? This last would not be appropriate for a single phenomenon like a city, a shopping center, or a factory, but it would be applicable to cities of France, tobacco production in Georgia, railroad lines in Argentina, etc. The focus of the question, "Where is it?" will change with the kind of problem.

2. Why is it there? Are there any particular factors which seem to have been important in its being located where it is, or in its pattern or distribution? And what gave rise to its development? The conditions may be different now than in the beginning, as with cotton production in the United States, transportation routes, or even the location of a city such as Memphis. The question is often difficult to answer, requiring much research, and should not be left simply to assumptions or inferences based on present-day ideas, information, and values. A thorough delving into history and historical documents will often provide many insights on present and past characteristics.

3. How much is there? In some problems this question is not appropriate, but in others it is. It is frequently helpful to know something

about quantitative value and what the trends have been. If one is concerned with airline passenger traffic, tonnage passing through the Suez Canal, importance of cotton gins in Georgia, and the like, the present quantitative value and past changes or trends in this value often provide helpful ideas that will relate to the fund of information developing on the problem.

4. What are (or were) its relationships with other places? The purpose of this question is to focus on the connections between the place or area being investigated and other places. The number and kind of connections may be more important in the development, present status, or changes than in the immediate locational characteristics.

5. Is there reason to believe any changes will occur in the near future? Prediction is risky, but it is often possible to assemble a body of knowledge on a problem, make an analysis of the data, and determine what past events have been important in producing change. An analysis of present conditions may then help in making a reasonable prediction of what changes are likely to occur in the future.

For any specific topic or problem not all of the above questions would necessarily apply, but these are the kinds of questions that are appropriately asked.

Geographic Concepts

There is no complete agreement by geographers on exactly what concepts are basic to the discipline. The list that is offered here includes most of the major ideas of scholars who have written on this subject, but it is given a slightly different organization. Four principal organizing concepts of geography are the following--(a) Culture, (b) Spatial Distribution, (c) Spatial Interaction, and (d) Region.

Culture. The concept of culture has only recently come to be recognized by geographers as a basic concept. Entire volumes and dozens of papers have been written about culture (mostly by anthropologists) in an effort to define it. Geographers have added little to the concept and have essentially adopted the anthropological interpretation and incorporated it into the geographical method. In brief, culture is taken in its broadcast sense and includes those material and non-material traits of a people recognized as their total way of life. That is, culture includes the attitudes, values and belief systems, tools and technology, social and political organizations, economic system, and the method of enculturating the young so that they may become prepared to function in their society and perpetuate the way of life.

It should be obvious that the geographer is usually not equally concerned with all facets of culture, but he will sift out those elements that will aid in providing the understanding and explanations he seeks. For example, some questions that relate to agricultural practices, systems of exchange, and resources are adequately answered only by reference to the culture of the society involved. The geographer has much less interest in topics that lack a spatial dimension such as kinship, belief systems, rites of death, and the like.

Geographers have recognized for some time that there are no intrinsic characteristics associated with any particular kind of physical matter that require it to be labeled a resource. Whether the item is rocks, soil, coal, wood, gold, or radioactive ore, none of these has characteristics demanding recognition as a natural resource. Instead, the potential or actual uses to which these can be put make them resources, and it is a people's culture that makes this determination. Different cultures will frequently have different value systems in the recognition and utilization of things called resources.

There is another aspect of culture that has recently attracted the attention of geographers, and this is the field of perception. Many geographers formerly assumed that all people perceive of the same phenomena in the same way, and thus an ethnocentric judgment was frequently made. But this line of reasoning is now questioned. For example, the nomad probably perceives of the desert quite differently from the inhabitant of a humid region. Or a person on the coastal plain may perceive of the mountains differently from people who reside in the mountains, and vice versa. Distance may have quite a different meaning to the person living on a large ranch in Texas than for the resident of Atlanta. Perception is also recognized as a trait which is learned, and people in different cultures or environments attach different meanings to the same phenomena. Geographers, therefore, are now coming to realize that in the search for explanations of certain human decisions, a knowledge about perceptions of the people involved is a vital element and may be more important than the actual facts.

Concepts related to culture include acculturation, culture area, diffusion, and social change, any one of which might be a focal concept for a particular problem or exercise. A geographer might stress only one of these (such as the diffusion of Islam, or the social change resulting from the Mexican land reform program) if his objective were to develop the concept rather than study a total culture.

Geographers do not have as one of their goals the study of all the world's cultures. This would be an impossibility. They do select particular problems or activities that relate to the human decisions, assessments, and activities within the context of a culture. These may be quite different among peoples. And, even though people of one culture have adopted methods, values, or attitudes that might be found to be dramatically different from those in another culture, each has abundant reason to find some comfort and satisfaction in their own way of life.

Spatial Distribution Geographers are concerned with specific location, yet any one location may have a variety of characteristics. If a characteristic is selected and its location recorded on a map, the result shows its distribution. For example, one of the characteristics of Athens, Georgia, is that it has textile mills. If on a map one were to place a dot locating each textile mill in Athens, and then continue this for all mills in Georgia, the map would show the spatial distribution of textile mills in Georgia. The same could be done for any characteristic and in any part of the world. These distributions often permit a degree of generalization that is not possible by examining data in a table because the table does not readily show the spatial dimension.

Analyzing distributions and seeking explanations for them are important parts of geographic method. A word of caution is necessary, however. Seldom are there simple explanations for the distribution of phenomena. For example, it can be said that most of the people of China live near the coast because of the level land; the distribution of the iron and steel industry in the United States is determined by the distribution of coal; the distribution of the rice growing areas of the world is determined by the warm, humid climates. Yet none of these explanations is satisfactory. In fact, some would argue that they are false. To account for any particular distribution, especially where man and his culture are involved, is very complex and requires much study and analysis. But this is the challenge that the geographer accepts.

There are other important concepts in geography related to spatial distribution. Some of these, such as place and location, refer to single phenomena and are the ingredients of spatial distributions. Similarly, it might be argued that the concepts of site (the detailed position on the land, usually with reference to a settlement) and situation (location with reference to other places) might also be included here. On the other hand there are the concepts of density, network, pattern, and dispersion, each of which is used to describe a particular distribution. All of these are found among the geographer's concepts.

The concept of spatial distribution is useful to the geographer in two ways. It may permit a degree of generalization of a particular phenomenon on a map prepared by someone else (as that in a textbook or an atlas). Or the preparation and analysis of a spatially distributed phenomenon may be a step in a problem or research activity in which one will be testing a hypothesis or formulating new hypotheses. In either instance, it is one of the oldest and most used concepts of geography.

Spatial Interaction. One of the reasons many people have a natural interest in geography is that commodities, people, and ideas are not fixed elements on the earth. The movement of these and other things is not in a random pattern, but occurs in response to a multiplicity of pressures that set them into motion. Whether it is the rural-urban migration of people, the movement of iron ore from Venezuela to Delaware, the broadcasting of news from a television station, or the American tourist in Europe for the summer, such occurrences spur change and establish associations that make the world different. Spatial interaction is a measure of the extent to which one location or area is tied to another.

If one considers the city, the central business district usually has an advantage over other commercial areas because of its central location. It usually is the point in a city most accessible to the entire urbanized area, and therefore has an advantage over other points in the exchange of goods and services. However, with freeways and the migration of people to the suburbs, neighborhood shopping centers have gained in popularity, partly because of their accessibility. And distance is not always the most important consideration in this interaction because frequently a number of other things, such as time and cost, are important factors. On the other hand, a lack of either centrality or accessibility produces a degree of isolation that usually induces a decline of function, whether it be for a single store or a shopping center. Through the innumerable linkages that permit interaction over space, a variety of spatial associations is established which give rise to areal coherence.

The example used here was the city, but one could note the same for a particular area or region of a country or for an entire nation. Spatial interaction produces change in the characteristics of places, and geographers, in measuring the degree and amount of this interaction, try to determine the impact that it has, or will have. Or they may attempt to account for the amount of spatial interaction of a particular phenomenon.

This concept of spatial interaction is probably the one that has received most attention by geographers in the past decade or two, and it has therefore undergone the greatest recent development. Studies dealing with cities, transportation routes, and migration of people have received much attention, but the concept has application to practically any topic with which geographers deal.

Most of the other geographical concepts that relate to and are in fact part of spatial interaction have already been mentioned. They are centrality, accessibility, distance, linkage (or communication), isolation, spatial association, areal coherence, and interdependence. Many geographers and teachers often find it useful to stress some of these lower order concepts in building the concept of spatial interaction. For example, if focus is given to the concept of centrality when accounting for the development of Chicago as the great railroad center of the United States, or of Rotterdam as one of the great seaports of the world, and then some of the other concepts are tied in with the idea of centrality, often the understanding of the concept of spatial interaction is simplified.

Region. As used by geographers, the concept of region is in reality a technical term. Regions do not exist naturally on the face of the earth, but are created by and in the minds of humans. And how one person perceives a particular region might be quite different from the way it is perceived by another. Examples of this are "regions" like the Middle West, the West, or the Southeast as parts of the United States, or the Cotton Belt, the Corn Belt, the Amazon Basin, the Central Swedish Lowlands, the Pampa, or the Great Hungarian Plain. Different people will define the boundaries of these regions quite differently, and still all may be correct. Regions are mental constructs, not natural entities existing on the land areas of the earth. Yet this fact does not detract from their interest to the geographer. In fact, it may enhance his study of a region.

Geographers are interested in attempting to delimit areas of the earth into regions where some particular phenomenon, or an association of phenomena, dominate. In doing this they distinguish between two quite different kinds of regions. One of these is the formal region. The criteria used in delimiting such regions are usually based on something that is fixed, at least temporarily, in a particular place. Examples of this might be the region of the piedmont in Georgia, the prairie region of Alabama, the region of wheat production in the United States, or the tobacco growing region of Georgia.

In contrast to the formal region there is the nodal or functional region. The delimitation of these regions is usually based on criteria that relate to the idea, if not the fact, of spatial interaction. That is, the trade area of a supermarket is the region in which the people live who buy their groceries at a specific store. Other examples would be the service region for a particular fire station, the distribution region for the daily newspaper, the delivery region for the major department stores of a city, and the like. Geographers have become interested in these kinds of regions, a fact which probably relates to the recent emphasis given to urban geography. Frequently geographers will select several criteria in delimiting the trade or service area of a city in an effort to learn more of the interrelations that exist between the close-in and more distant parts of a city. Once this is done, some analysis of the patterns and boundaries will follow.

Summary of
A Conceptual Approach to Geography

Culture

Acculturation
Culture area
Diffusion
Social Change

Region

Formal
Functional (nodal)

Spatial Distribution

Place
Location
Site
Situation

Density
Network
Pattern
Dispersion

Spatial Interaction

Centrality
Accessibility
Distance
Linkage
Isolation

Communication
Spatial association
Areal coherence
Interdependence

Structure

The structure of geography can probably best be described as a "point of view" or what Pattison calls a "manner of knowing." The professional geographer was attracted to the discipline perhaps because of a curiosity or interest in some of the basic ideas or concepts of the subject, by the kinds of questions that geographers ask, and the procedures and techniques used in finding answers. And if geography has a structure, it must revolve around these three things, all of which are briefly dealt with in other sections here.

One way to structure geography is to organize it around discipline. This approach interrelates the fundamental concepts discussed in the preceding section.

How might the geographer proceed with investigation? There are probably at least three research traditions that have been commonly used in the discipline and which might be called (a) satisfaction of curiosity, (b) geographical description, and (c) spatial analysis.

The satisfaction of curiosity refers simply to a question to which a geographer is seeking an answer. The problem will focus the attention of a geographer on a single subject and the exercise becomes a learning activity with no other particular goal. For example, a geographer may wonder if Macon, Georgia, is really located on the fall line, and if it is, how important this fact was in selecting the site for that city. Or, to what extent are the iron smelters of the United States dependent on foreign sources of iron ore? Or, why is it that in the southern city one often finds several Negro residential neighborhoods while in northern cities there frequently is only one? Or, is there some kind of a model that can be developed which will help explain or demonstrate migration patterns in the United States since World War II?

Each of these questions would require the geographer to resort to whatever data or techniques would seem fruitful. The avowed objective in each case can simply be to satisfy personal curiosity. The only thing that is particularly geographical here is that in the examples cited, the problems do relate to people and space. But many other problems are investigated by all students and scholars without regard to their discipline. This, in many ways, is probably the most common research tradition of any scholar or student, regardless of his discipline affiliations.

Geographical description has a long history, but a stormy tradition in the field of geography. It can focus on an entire nation, or move to larger scale items like a region, a city, or a single farm. Or, it can deal with topics such as potato production in Maine, changes taking place in railroad transportation in the United States, or the importance of corn in the rural economy of Mexico. The research usually involves collecting data, organizing it, and then often attempting to produce an interesting narrative that will afford the reader the opportunity for a vicarious experience. Research then often becomes a series of "satisfaction of curiosity" questions since one usually attempts to learn as much as possible about his topic or area before beginning to write his narrative. It usually has a goal beyond that of personal satisfaction since it ends with a product--the description. One of the common shortcomings of this research tradition is that frequently there has been more focus on presenting factual data than on the analysis, evaluation, and interpretation of that data. Some geographers now argue that pure description is no longer accepted as good geography, while others maintain that it has a long and respected tradition and is still deserving of support. The controversy will not be settled here, but it is perhaps fair to suggest that geographic description no longer has the support it once had.

Spatial analysis has a research tradition of several decades among geographers in the United States. In the early days of this century the research map, graph, or other graphic forms were employed for the purpose of assisting researchers to analyze data, distributions, patterns, associations, and the like. Since the 1950's statistical techniques have become a more and more common analytical tool, which has been a factor in developing a focus on spatial analysis. Research efforts here might focus on the correlation or association of several variables, such as corn production, soil types, precipitation, application of fertilizers, size of farms, history of production, etc. In using a multiple regression analysis one might be able to explain variation in corn production in the counties of Iowa. Or, in attempting to understand something of migration, a geographer might determine the correlation coefficients between migration rate and a series of independent but related variables; thus he might determine what variables seem to be most important in explaining certain migration flows. In the procedure touched on here the map remains a basic research tool, but with the addition of statistical techniques the geographer can probe deeper and over a wider range.

Within the spatial analysis research tradition there has developed a new interest in empirical method. Many geographers in reports on their research projects follow a rather standard model used in thesis research. Other geographers are less formal and take a more relaxed approach by not formulating and testing hypotheses, but they usually do maintain their focus on spatial analysis. It might be added that this tradition also has application to the two traditions mentioned above. One may use the most sophisticated statistical techniques employing the most recent computers simply to satisfy curiosity. And, in preparing a geographical description, much preliminary spatial analysis may be part of the data gathering stage before the narrative opens. Thus this tradition has applications to the other research traditions in geography, which perhaps explains its rather rapid gains in popularity since the 1950's.

In conclusion, it appears that any geographical problem should focus on analysis in developing one or more pertinent geographical concepts. The model of inquiry should employ the appropriate questions as the guide to what data need to be gathered, and the generalizations or conclusions should show the relationship of man to his spatial reference in demonstrating the importance of the concepts to the problem being investigated.

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HISTORY

Nature and Scope

History is the record of experience--all that has happened to man from the beginning of time through the last elapsed instant. It is the effort to grasp the whole of human experience through its chronological framework. The skeleton of history is time; its flesh is humanity.

If man is to be viewed in his entirety, if he is not to be styled simply as an economic or political creature, if history is to see him whole, it must involve other social sciences. The house of history includes those working in national and international events, with religious history, artistic or intellectual concepts. Those who are tracing the developments in public health, immigration, agriculture, inventions, folkways, and science, as well as biography and the stories of growth of towns, cities, business, industry, and mechanization, each add a part in history's reconstruction.

From these many strands, history is woven into a pattern. Although it is directly connected with developments in anthropology, political science, sociology, statistics, literature, and other disciplines preoccupied with the thoughts and behavior of men, although it is closely integrated with most other branches of knowledge, it is a discipline distinct from them. Scholars now realize that the Hegelian-Marxian concept of history as a rational process underestimated both the irrational and emotional forces that motivate man and the importance of the accidental and the contingent in history.

The forerunner of the modern school of historians was the Greek, Thucydides, who wrote his History of the Peloponnesian War in the fifth century B.C. In supplementing his own observations with reports of other eyewitnesses, he found the accounts differed due to partisan bias or lapses of memory. Disdaining the narrative or storytelling style of Herodotus, he tried to present "an exact knowledge of the past" by subjecting his data to the "most severe and detailed tests possible."

During the Middle Ages ecclesiastical authorities stifled the spirit of inquiry. Medieval scholars inherited the Greek method of reasoning from axioms that were not to be questioned. Thus, the classical heritage of "knowledge" was regarded as a body of ultimate truth. It was not until the Renaissance that numerous scholars began criticizing the texts of various documents in an effort to restore the original readings from faulty copies.

The liberation of history from theology reached its fullest development in the historical works of the eighteenth century. Gradually men turned from authority to evidence based on observation. Former notions about nature and its ways were superseded by the scientific laws formulated by men like Galileo and Sir Isaac Newton. Gibbon attacked St. Augustine's defense of Christianity. Voltaire, Herder, Kant, Condorcet, and Humboldt discovered some sort of inherent evolutionary tendencies in historical change and progress. Both Hegel and Marx saw no faith beyond history, agreeing that the historical condition determines the human situation. Hegel accepted the idea that history was intelligible because it was a product of reason instead of Divine Providence.

Historians attempted to make use of the scientific procedures, assuming that man's acts were determined by natural laws. Just as the discovery of natural laws opened the world of nature to human conquest and control, so man could master the social world by discovering its laws. Like the scientist the historian would set forth a hypothesis based on observation and, after severe testing, would formulate laws.

During the early nineteenth century Leopold von Ranke, the Prussian historian, took the lead in developing history as a scientific discipline. His monumental works based on archival materials, using critical methods to sift, test, and evaluate, brought students from all over the world to his seminars in the 1820's. Methodology was hailed as the cure and hope of historical scholarship in making it equal with science. Ranke wrote in the preface of _The Varieties of History_: "The strict presentation of the facts is the supreme law of historiography. We must show only what really happened." Scholars felt that history had at last arrived as a legitimate scientific discipline.

Historians became increasingly aware that the scientific conception, the systematized method which distinguishes a science, was as incompatible with history as the rational method which distinguished traditional philosophy. The discovery that history could not achieve scientific objectivity or finality deeply disturbed them. There was a succession of assaults upon the traditional assumption that society rested on rational foundations. Nietzsche, Bergson, William James, and others discovered irrational powers, undercurrents, and unconscious drives permeating history. They concluded that emotional and irrational factors such as class interests, social stereotypes, dogmas, myths, ideologies, and illusions were ever present.

Scholars became concerned with human life in its totality and multiplicity. Leo Tolstoy claimed that history could not be scientific and yield laws because it _represented_ only .001 percent of the elements that constituted the real _history_ of peoples. Thus, pretending that history is a science was a fraud--no genuine laws of history had been discovered.

The historian's aim was gradually changed to one of portraying people, nations, cultures, customs, institutions, myths, and thoughts in their processes of continual growth and transformation. Although there would be no general laws or principles emerging from these historical forms, the meanings of history would be evident in the individual manifestations of the different ages and various cultures. This led to "relativism," each strand in the tapestry of history was unique and equally significant. This relieved the historian from taking a chance on an original idea or a suggestive hypothesis. He simply had to be impartial and objective in reporting the facts.

The historian found himself on the horns of a dilemma. On the one hand he was to seek diligently for the truth and at the same time admit that this was unobtainable. James C. Malin writes that history can never be reduced to the reconstruction of "the unique fact as past reality," but it took a long time for many to admit this. The historian has learned that he must be satisfied with a careful analysis of historical situations and to the best of his ability present an accurate and adequate representation of them in written form.

Today, history and the social sciences appear closer than ever before. Just as the natural sciences are more descriptive than prophetic, so the social sciences tend more toward analysis of behavior--the description of states of mind and culture--than forecasting of trends. Historians are more concerned with particular problems, more likely to reexamine established facts from a fresh perspective dictated by the concerns of their own time and place. They tend to deal with historical material in small, manageable fragments, often selected on the basis of their relationship to the present. Like the social scientists, historians are concerned with the rising concentration in industry, mass communications, our emergence as a world power, urbanism, confrontations and violence, minority groups and civil rights, and the powerful military complex. Other scholars, as well, want to know what proper responses should be made to these problems by our national and state governments.

Like the artist and the writer, the historian uses his intuition, sees men as individuals, presents a mood, tells a story. He is concerned with intangibles that may be difficult to measure. The study of man as an individual or in groups--the relation of one man to another man, one group to another group--not only requires the description of institutions created by man, but also explanation as to why his social inventions and techniques take the forms they do. It is perhaps the complexity of such whys, questions involving reasons, motivations, and aspirations of significant individuals in particular situations, that gives history qualities of the humanities. Historian W. Stull Holt writes that "history that leaves out the poetry of life is both incomplete and dangerous." Like the poet, the historian must make the past and present meaningful and thus render order to man's life to enable him to better understand it.

The plethora of disconnected historical facts that frustrates novices arises from a misconception of history as a whole. Admittedly many books and courses in history do contain a formidable array of facts that may have to be accepted on faith. Reduced to a workable minimum and conceived in an orderly way, such facts are highly valuable as a frame of reference. Emphasized for themselves alone, they remain empty and devoid of meaning. Used to validate reasoning, theories, and refutations, they are vital to clear thinking and sound judgment. The historian uses his evidence to enforce his arguments and to fill out a story or describe a whole situation at any given time. He shows the exact sequence of facts and their precise relationships that form the foundation for historical patterns.

If meanings are to be developed, every historian must be as objective as possible; otherwise he may become no more than a propagandist. Selection and interpretation of facts are subject to varying degrees of personal judgment and these processes are as important as their collection and verification. W. W. Walsh suggests that three main factors tend to distort a scholar's objectivity: personal likes and dislikes, prejudice, and theories of interpretation--historians are apt to become emotionally and intellectually attached to what they want to find. In spite of himself, the historian is obligated to be as objective as possible, recognizing that complete detachment can never be attained no matter how hard he tries. He constantly evaluates his personal beliefs, prejudices, and pressures in his efforts to hold to the justifiable and accurate.

In his presentation of facts and development of meanings the historian attempts to bring out the special aspects of the evidence for the creation of a human story. He aims to make the reader believe that real people lived in ages past. History is not an abstract; its conveyance requires stoking the imagination and hearts of his audience as well as firing their minds.

The historian is not as free as the artist, for where the latter creates, the historian must recreate. In compiling his evidence and fitting it together to make concepts, he may use laws or theories propounded by the social scientists, but he hesitates to accept their sweeping generalizations. Historians are often criticized for their supposed failure to generalize or accept generalizations in other fields. The historian finds it difficult to find theories that withstand his penetrating search for exceptions. Men appear too complicated, too spiritual, too varied, for scientific analysis. The historian, therefore, makes only limited generalizations.

Isaiah Berlin, in his Hedgehog and the Fox, tells the story of Count Leo Tolstoy's lifelong search for an all-encompassing theory of history that would tie up all the loose ends of human experience so that he might understand clearly the reason for man's existence. Despite his often frantic efforts, his long search proved futile. Every theory fell short when he weighed it against the many exceptions that came to his mind from his own deep knowledge of history and people. He died still engaged in his quest.

This is why historians no longer argue, as during the late nineteenth century, whether history is a science or an art. Efforts by German historians to make history a science in the same sense that physics, chemistry, biology, and similar disciplines are sciences, made an impact on American scholars. To consider history as belonging exclusively to the social sciences or exclusively to the humanities merely adds to the confusion separating the two today. In a sense history--neither an art nor a science--bridges the gap.

History today, suggests Allan Nevins, is largely an effort to chart lines of force; the rapid transformation of our world constantly pushes us to change our views about facts or data. We are no longer so interested in the grand central theme Henry Adams used in studying the past, namely the national character; its sources, its growth, and its results. We are no longer interested in seeing history, as did George Bancroft, as the will of God working through events and Social Darwinism. Today we are interested in studying society as a whole, in its entirety and its constant flux.

Although the study of history is seemingly replete with "facts" to the novice historian or the casual reader, the professional historian would prefer to view them as "evidence," "data," or "findings." He nevertheless rests his understanding of the past upon information that he has verified to the best of his ability and training. He finds that he can use new tools in getting both his data and making his qualified generalizations. For example, he finds a knowledge of computers as valuable as a working command of another language. Mastery of statistics and knowledge of a broad array of new conceptual tools--

economic, sociological, anthropological, numerical, psychological--enable him to analyze better the development of society as a totality.

Basic Questions Historians Ask

If the mission of history is to engage in search or inquiry, what are the questions which historians ask and try to answer? R. G. Collingwood states that historians collectively are asking about the many past actions of human beings. Historians describe what man has done according to the evidence and interpret it so that we may better know ourselves in the present. We seek self-knowledge.

Self-knowledge is a complex pursuit and certainly not confined to the field of history. But the historian investigates man's past actions that enable him to better understand human nature. The central value of history, according to Collingwood, is in teaching us what man has done and therefore what man is.

It is small wonder that historians have difficulty in pinpointing the basic questions when there are so many reasons, most of which are too vague, to justify the study of history. One survey found 1400 stated objectives for teaching American history alone. Another found 125 objectives for one course of study in social studies in one grade, 85 in the introduction to one unit, and 74 mimeographed pages of objectives for one junior high school course of study. Such aims included citizenship, patriotism, moral judgment, memory development, the democratic way of life, and numerous other vague ideas that contributed to the dilemma of a teacher attempting to develop his course.

Before the objectives can be narrowed to a practical level, it is necessary to understand what value history can hold for the student. Ostensibly, history presents a mountaintop panorama of human knowledge from which man can be viewed in perspective--he and his present activities can be placed as part of the living process of human growth which has emerged from the past.

Unless a society understands how its present-day problems originated, suggested remedies are apt to prove rather naive. Gustavson points out that the person "who heedlessly escapes into the present will always carry with him a flat, unbalanced picture of our day and an entirely inadequate impression of the nature of the social forces which ceaselessly impinge upon us." The psychiatrist delves into the patient's past before he dares to direct him. Just as an individual's personality represents all that he has experienced, so too, the conduct of nations and institutions reflects the forces that shaped them. In a sense, a student of history is assembling a gigantic jigsaw puzzle--he is learning how the world in which he lives was put together.

Gustavson points out that, as captains and navigators had to know the ways of the sea, the citizens of a republic need to know the social forces whose operations make up history. Not only does history give us background and perspective for our present problems; it enables us to develop a sense of continuity and feeling of personal responsibility for furthering human progress. It enlarges our sympathies and horizons through understanding of other nations and peoples; and thus we develop a social consciousness inclusive of all races and peoples. In short, historical study leads to perceptive habits of thought and practice in reaching sound and reasoned conclusions. Thus, although history does not claim to answer all basic questions about man, it does enable the mind to acquire sensitiveness and imaginative range.

Basically, questions the historian ask may center around the essential results that he hopes to achieve. If the historian is basically interested in achieving a better understanding of human behavior and the human condition, he must not only increase his factual information but must sharpen his ability to evaluate conflicting evidence and come to "feel" the past. He must learn to distinguish accurate from inaccurate information; he must constantly question the validity of any data. This also means that he must increase his ability to visualize and interpret his findings. Through such real or vicarious experience, he becomes increasingly aware of the possible range of human behavior. He asks, what are similarities and dissimilarities among peoples? By seeing the world in a particular period, by studying human beings in several different societies and eras, the scholar can then understand that what seems so obvious in one age may be untrue in another.

If the historian is to achieve these results, he must break down broader inquiries and objectives into questions that are specific enough to provide a basis for structuring historical study. For instance, in this day of hydrogen bombs, a time when it is possible for the peoples of this planet to terminate its history, a most important question the historian, teacher of history, and students should ask is, "How can we achieve international peace?" International understanding should be one of the central questions around which a history course is organized. Similarly, and attendant to the first question are, "Can we develop a world-mindedness? If so, how can we do this? Has history given us guidelines in developing world-mindedness and understanding?"

Problems of urban and rural areas are pressing on us, defying solutions as technology develops so rapidly that apt techniques today become unworkable tomorrow. The professional historian, the teacher, and the student can ask how and why social change occurs; how and why a change is confronted. History concerns the creating and understanding of the whole process of evolution and revolution. Why do similar social conditions produce different results? What were the causes of social reform? Nothing is more fundamental to a society than the process of change and adjustment, for herein can be found the key to its existence.

It is imperative that historians continually ask about changes, ever present as they are. This also becomes a most important kind question the history teacher can and must ask. It is not enough to assume students will automatically see that change is taking place; the teacher must constantly ask, "What change did occur?" Something changed from something to something else. Only by continually asking how and why our institutions are evolving--whether they be our form of government, education, or religion--can we view them properly as dynamic, human inventions.

As Fowlkes points out, this idea of continuous change is essential for a democratic society; the greatest obstacle to progress is a citizenry who believe that things are as they have always been, and so resist any effort to change them. No idea, no historical force, no social institution has ever been created spontaneously. All originated in the past, many stretch back thousands of years. By studying the changes and developments of these social, political, intellectual, economic, and cultural institutions we learn to view them with knowledge and understanding, rather than with emotions, instinct, and intuition.

It is impossible to list all of the questions that the historian or even the beginner studying the discipline should ask. The basic questions are those that show how historians proceed most effectively and those that the novices are trying to ask, such as, "What kind of people are we? What makes us the way we are? What has time done with us and our ideas? What portions of our heritage are efficient and worthy of preservation today?"

Since inquiry is at the heart of the historical process, the structure of history is determined by the questions the historian asks in trying to determine what man is. The questions will vary with the researcher--there is no one set of questions. However, there are useful lists, such as the nine questions posed by Fenton in his book on the inductive approach. Questions which stress the interpretation of facts are as follows.

1. What was the immediate cause for the events?
2. Had there been a background of agitation for the principles victorious during this episode?
3. Were personalities involved on either side whose strengths or weaknesses may have helped to determine the outcome of the struggle?
4. Were any new and potent ideas stimulating the loyalty of a considerable number of people?
5. How did the economic groups line up on the issue?
6. Were religious forces active?
7. Did any new technological developments influence the situation?
8. Can the events be partially explained by weakened or strengthened institutions?
9. Was the physical environment itself a factor in the situation?

The National Council for the Social Studies' 30th yearbook, Citizenship and a Free Society, lists the following questions as good ones for the study of a person.

1. What were the major contributions of this person and why were they important?
2. Did the person promote or retard change and in what way?
3. Who were some of his associates and some of his opponents and what were his relationships to them?
4. What special qualities did he possess for leadership?
5. To what extent do you believe he stood for wise and enduring ideas?
6. What were the consequences of the decisions that he made?

Principal Methods or Procedures of Investigations

History, then, has value for critical inquiry. The discovery approach, the historical method, is essential to the value of history; it may be contrasted with other inquiry in its combination of truth with human encounter. Historical method is largely the expert handling of evidence, involving selection, evaluation, and presentation. But the reconstruction of the patterns of life, interpretation, cause and effect relationships, and prediction of trends must inevitably be worthless if there are errors in selecting and evaluating the evidence.

Although historians work with subjects that do not permit them to avoid a degree of subjective involvement, they retain the historical method, largely the expert handling of evidence, that evolved during these years of dispute over the nature of history. In summary, the historical method involves three steps: selection; the gathering and the evaluation or criticism; and the presentation of facts, interpretations, and conclusions in readable form.

The first step in the investigation of a subject is to build a tentative bibliography. Starting with guides to bibliographies, the historian pursues those pertinent to his inquiry and separately records each that may yield information. He continues to add to the bibliography as his research proceeds, being particularly careful to check the bibliographies of secondary books in the field. He uses various guides to books, journals, and periodicals, the indexes to newspapers, government documents and compilations, archival collections, and journals or diaries. He investigates memoirs and autobiographies, letters, stenographic and phonographic records, and may interview persons who possibly have useful information.

The next step involves "external" criticism--examining these manuscripts, books, pamphlets, maps, and other sources with the aim of determining their authenticity. It is vital and often difficult to determine the authorship of documents, and historians on occasion have fallen victim to spurious papers. Once a document's authorship has been validated, the next step is "internal" criticism--attempting to insure that each statement in the document is fully understood. It is easy to read a meaning into a statement that the writer did not intend to convey, especially when the historian is looking for a particular meaning. Even the most careful person may take words out of context, unconsciously, trying to support his theories or hypotheses. Finding the literal meaning is a must.

The historian continues to be skeptical about every statement. Gossip, slander, and rumor often find their way into histories, and myths, legends, and traditions are difficult to verify. Circumstantial evidence yields some facts that are undeniable, but inferences made by the historian should clearly show that he has drawn them on his own.

The training of historians includes instruction and practice in the historical method. The weighing of evidence, the detection of bias, the distinguishing of truth from falsehood, a sense of time, and an awareness that the things that are known result from a process of training that characterizes history. The discipline tends to improve accuracy in comprehension and helps the student distinguish what is relevant, to select what is important.

Historians today are attempting to restore the relationship of history to reality and its usefulness to mankind. No longer can it be accepted that scientific procedures alone free the historian of his responsibility for drawing conclusions. No longer do scholars accept the idea that history can simply lay bare the "facts"--this idea has been too thoroughly disgraced. Not only are historians presenting hypotheses; they are also concerned that history be written in as lively and exciting a manner as their ability and material permit.

Concepts

Although historians have abandoned the idea that they should derive general laws from their studies, there are many regularities and patterns in human behavior that can be described. In some cases these are patterns that have been presented by other social scientists and the historian's responsibility is to test them against past human experience. He uses the historical approach to authenticate, correct, or negate popular interpretations of behavior by resisting over-simplifications and checking such notions against specifics.

The historian constantly relates details, organizes his data, and solves problems from relevant information. In attempting to make history meaningful, he develops concepts--generalizations that explain details. For instance, as Robert V. Daniels points out, the concept of the "Enlightenment" is used to explain the liberal tracts and writings in the eighteenth century. The concept of the "class struggle" is useful in explaining why the French fought each other in the nineteenth century. Thus the historian, by constantly reducing masses of data to a few concepts through this process of collecting and interpreting, learns to avoid being swamped in details that may soon be forgotten.

It is possible to test many concepts against several time periods or eras of history. The concept that "a coherent account of the past of a culture will involve social, political, economic, and geographic factors," is evident in a study of the cattle industry that emerged in Texas after the Civil War. Economic factors motivated cattlemen to drive their herds across the grassy plains to the railroad towns in Texas. The impact of geography is obvious. These wide open ranges stretching over a sub-humid area had defied early attempts at farming by men accustomed to techniques that had been successful in the wet, wooded eastern part of the country. Out of this new industry there developed the cowboy and a cattle country society. The political factors involved are illustrated in the laws that protected the small homesteader who eventually gained the technical knowhow to cultivate this rich land and the pressures exerted by both farmers and cattlemen on the state and national governments. The interrelations of these factors tend to give meaning to the generalization.

The same concept can be supported by a study of the events leading to the Opium War between England and China in 1839. England discovered that since its woolens were not desired by the Chinese, the only way it could keep its gold and silver from flowing into China in payment for Chinese goods was to make the exchange in Indian opium. The loss of the silver to China adversely affected its currency and finance. The trade, though benefiting a few Cantonese merchants, was producing serious economic consequences within China. The fundamental differences in both the theory and practice of government as between England and China, the attitude of the Emperor in Peking toward foreigners and trade, and the Imperial government's efforts to stop the importation of opium substantially illustrate that social, political, economic, and geographic factors are necessary for the development of a coherent account.

Another historical concept easily tested is that change has been a universal condition of human society, but that change and progress are not necessarily synonomous. World history, national history, and state history all tend to show that this idea is valid. The failure of the Roman Empire and the chaos of the dark ages is quickly remembered. However, it is also possible to generalize from research that is being done on this period: even during the time when the heritage of the classical periods of Greco-Roman history was diminished and threatened with destruction, there were new political and economic forms being developed that represented progress.

This same concept, that change and progress are not the same, can be identified with the Reconstruction period in the South following the Civil War. A gracious way of life for the plantation owners was doomed and most Southeners who supported the Confederacy faced political, economic, and social disorder and hardship. But the former slaves progressed in many ways following their emancipation. New state school systems and penal codes represented progress for most of the South during these dark days. The history of each state during Reconstruction or during the Great Depression of the 1930's further proves the validity of this idea.

It is possible to list dozens of other concepts of generalizations that have emerged from the study of history. A sample list, compiled by various scholars, includes the following.

1. The history of all periods of recorded time reveals both the homogeneity in mankind and evidence of constant changes in human society.
2. Events have causes and consequences because events are related to times and places beyond the time and place of their origin.
3. Interrelationships between individuals and events produce historical forces which are ever-present and important factors in human societies.
4. Events have causes and consequences depending on the interrelationships of the factors within a given event.
5. What we leave behind today will influence tomorrow, and in turn, we have a debt, as does any generation, to those who have gone before.
6. Changing world conditions have led to increasing interdependence among nations and have led the United States into world leadership.

7. The struggle for a good life takes different forms in different nations, leading to varying backgrounds, conditions, and issues.
8. The relationship between freedom and respect for the dignity of the individual is inseparable.
9. History makes man aware of the possible rather than the probable, allowing him to choose among rational alternatives concerning the time in which he lives.
10. There are no immutable laws, givens, or inevitables in history.
11. Ideally, the past should be understood on its own terms. Historical events should be examined in light of the standards, values, attitudes, and beliefs that were dominant during a given period and for a given people, rather than evaluated exclusively by 20th century standards.
12. Rarely can complex historical events be explained in terms of a simple one-to-one, cause-and-effect relationship. Rather, a study of the past indicates that multiple-causation is the dominant pattern.
13. The record of the past is irremediably fragmentary, selective, and biased. The significance of available historical facts varies with the individual who studies them, and each generation tends to recreate and rewrite history in terms of its needs, aspirations, and point of view.

These concepts have been tested in depth by historians. The teacher can easily fit them into the various courses offered in the school. Again, since one of the principal values of history is the excitement that comes from inquiry, posing basic questions and allowing the student to uncover concepts on his own will be of greater value than simply asking him to accept these ideas, along with the data with which the teacher chooses to illustrate them. It is generally possible to arouse greater interest and consequently greater learning by turning the statements into basic questions so that the student himself must test them.

Other concepts can be developed by students. Following their own interests and pursuing their own analytical questions they will discover the fascination of the human drama which in itself should encourage them to become more interested in the civilizations of the world. They will find a new enrichment in literature, clearer explanations of civil government, and deeper appreciations of various social institutions, art, architecture, and music. In turn, these new insights often lead to further study and the development of more substantive concepts.

While social, political, and economic concepts are important, it must also be remembered that one objective for studying history is to gain an understanding of ourselves. History suggests a genuine commonality of man; men everywhere, and in all times, have shared the basic problems of living. Human traits--greed, heroism, egocentricity, stubbornness, honesty, and love--are as necessary to history as the heart to the body. The study of man in the past enables each of us to know that although we are one of countless millions, we each potentially possess the feelings, thought, and achievement that any man has ever felt, known, or accomplished. Thus, concepts about human nature are much easier to formulate and test against the past activities of men and are as important for the student.

Concepts developed about human nature should broaden and quicken our sympathies with other people. Men who share suffering tend to develop a spirit of community where none existed before. This concept can be illustrated from our own frontier experience. The first settlers who had banded together for protection against the Indians and sought comfort from the cold and hunger became the nucleus of the various colonies. The common cause of the colonies against the tyranny of the English king welded them into a confederacy. The hardships they faced in fighting Indians and in creating new territories fostered both strong state and national feelings. If the story is told well enough we develop an empathy with people of ages past. It is not possible for us to read about the tortures of the Inquisition, the horrors of the Black Death, the heroics and sufferings of soldiers from the campaigns of Alexander to the Crusades, from the Civil War to the Korean War, or the frustration and helplessness of peoples caught in economic depressions without reacting emotionally to them.

Whenever someone says "history proves...." or caps an argument with "that's human nature," the historian or novice history student should put up his guard. Concepts and generalizations challenge him to look to the past for origins, relationships, and comparisons before accepting them. He becomes historically-minded, becomes accustomed to a way of thinking, a form of reasoning, that makes him look below the surface for the shapes and contours of the dynamic forces in society. He learns to accept reality rather than his own wishful thinking.

Structures

Historians have had a difficult time agreeing on the structure of the discipline. The scholar's mode of inquiry is the most effective way of learning rather than the structure or curriculum. Works in history are planned because the author has a vision or an approach to one. As Nevin states, "the subject takes hold of him, inspires him, and lifts him to a plane where he sees as in a golden dream the volume he intends to write." He sees that it must be written in a particular way.

While writing a history of the Texas Rangers, Walter P. Webb was struck by the impact of the treeless, arid, level plans on men from the wooded, mountain or hill areas of the country where there was ample rainfall. He saw that the plains required a new technology before they could be settled, and this in turn created new social, legal, and economic institutions. He immediately laid aside his story of the Rangers to work day and night on this new problem. This revealed in the publication of his Great Plains, a classic in American history and one of the most imaginative recreations of the past.

History has endless variety. Perhaps the first requirement of one who is lured by Clio is that he shall be tolerant of all themes, all approaches, and all styles so long as they are written imaginatively in a patient search for truth about some phase or segment of the past. Since history involves many different subjects, it is necessary to arrange the record of the past into segments most relevant to interests of various scholars. Because it is so vast, it is impossible for historians to master all of it. Structuring this record without disturbing the natural unity of the past is a necessity. Obstensibly, the historian attempts to structure his scholarship into segments through which people's lives have been particularly linked.

Some of the segments that mark scholarly fields of study are quite obvious, as with political divisions--countries and states. Government above all gives to a territory the social unity and the common experience that permit studying its history as a country. And in the modern West, where the national state has prevailed, the national basis of history has been taken completely for granted. As Hans Kohn has pointed out, for 100 years history has been in danger of becoming the handmaiden of national or class interests and of providing absolution for all kinds of crimes that the individual conscience would not easily bear.

Too often it happens that this parochialism, this lack of perspective, is what we are taught about each other. Despite the present close relations between the United States and England, a study published in 1966 revealed that the writers of textbooks used in the schools of these two countries were guilty of national bias in one form or another. Studies have uncovered distortions in our textbooks on Chinese history. What, indeed must the French and Germans teach about each other? It is easy to imagine the kind of history used to indoctrinate Russians and Chinese about the United States.

While national history has its pitfalls of bias and parochialism, it is a necessary approach to a civilization, particularly that of the modern West. Several high school world history textbooks are divided into units on the principal countries. Historians have also divided Latin American history into countries; yet, it often is organized on a regional basis since Spanish culture and the common Spanish colonial experience still link most of the regions to a great extent. The same is true of other cultural entities, depending on the particular history. China has been a historical entity for centuries, even though politically it has never been completely united and independent at the same time.

Historians find it convenient to deal with large slices of historical phenomena, designated as civilizations which represent people living in a wide area and over a long period of time, united by certain characteristic institutions, values, beliefs, and backgrounds. Arnold Toynbee, in his Study of History, systematically compared the rise and fall of 21 civilizations. The civilizations for modern times include Western (European and the Americas), Moslem (North Africa and the Middle East), South Africa, Indian or Hindu, and the Far East. Obviously, several countries, one of which is Russia, represent the ways of living and thinking of more than one civilization. Distinct from the societies in the process of civilization, anthropologists have described more than 650 primitive societies, most relatively short-lived, confined to relatively narrow geographical areas and embracing small numbers of human beings.

The study of civilizations and long-lived national states must further be divided into periods of time if it is to be manageable and meaningful. This division should not obscure the basic continuity, but these periods should provide a framework for detailed inquiry. For instance, Western civilization may be divided into periods that represent phases of the common experience of particular nations such as the Dark Ages, 675,1075; the Middle Ages, 1300-1500; the Renaissance and Reformation, 1500-1700; modern Europe, 1700 to World War I; and contemporary history, from World War I to present. The divisions are then divided and subdivided into historical entities to focus on brief spans of time, places, or problems.

Other meaningful divisions can be made according to different forms of human relationships and activities. Within a certain area, over a particular span of time, an aspect of the life of society can have a distinct history somewhat independent of other happenings in the same society. For instance, history is divided into its political, diplomatic, military, economic, social, cultural, and intellectual aspects. These topics are often subdivided. Economic history encompasses studies of agriculture, industry, trade and transportation, technology, and business organization. Cultural and intellectual history may concentrate on religion, education, science, literature, or philosophy.

The choice of interrelationships among these topics of study, as well as the borderline events that may appear to be either political or economic, social, or cultural, depends upon the interests of the scholar. All are facets of human behavior and of the web of social life. Each affects the other, complicating the interrelationships. An overemphasis or neglect of one aspect tends to distort the picture and results in an unrealistic history.

When history is divided into its various topics, its involvement with other social sciences and the humanities becomes clearer. Because a single aspect of life cannot be isolated from its social setting, the study of history promotes a recognition of interrelationships. Aided by the insights of other social sciences, history tries to pull together its own recognition of unique and manifold events in time into a comprehensive view of the human experience.

History recognizes the reality of particular historic individuals and tries to understand their conduct and its consequences as much as movements of the anonymous masses. In fact, the historian often focuses on a biographical approach to understand the interactions of personal factors and social events. In some cases individuals make private decisions that influence history and in other cases persons accidentally act in ways that have important results. To have significance, a chance occurrence or an individual must influence others. Whatever the individual does, he is limited and challenged by the vast and complex forces of society, and these forces must be understood within their context.

During the second quarter of the century, social scientists increasingly discussed interrelations of their respective disciplines. The walls of separation began to crumble, and presently the expanding horizon brought even the natural sciences within range of the historian's vision. He realized that it was within his province to write histories of medicine, science, language, or the arts; and before mid century historical works concerned these various fields.

Not only new topics but new approaches to old ones are among the recent trends. One concerns the emphasis on local history--which is in reality regional and interregional history. As Clifford L. Lord states, local history "shows men living together, working together, getting along together (or not getting along together), at work, at play, in politics, business, government, social and cultural pursuits." The local historian's main responsibility is to keep the record, and these records are necessary for state histories, regional histories, and national histories. Each is a separate entity, yet each is a part of a whole. Local history reflects every aspect of our national history and thus enables us to better understand the process through which a nation was built.

Interest in a new approach to local and regional history mounted during the 1940's. It encompassed the study of literature, sociology, art, and folklore of communities as well as their politics and industries--in short, all aspects of their developments. Associations were formed to promote these studies and universities sought to become centers for research into their regions. State and local historical societies were supported by libraries, foundations, and professional historians who sponsored various conferences.

Recent Trends

Today, there is more emphasis in history upon psychology and psychiatry--although the latter is not yet so clearly in evidence. There is a greater preoccupation with intellectual history, and philosophers are focusing more closely on historical interpretations. At the same time a meticulous and critical search for a reasonable view of the past predominates. One result has been the wreckage of elaborate interpretations that revealed more about the historian than about the event.

While the historians were attacking old interpretations, criticism of the country's high schools became intense as a result of Soviet achievements in space. Admiral Hyman G. Rickover, father of the atomic submarine, James B. Conant, former president of Harvard, and Arthur E. Bestor, professor of history, blamed professional educators, and progressive education in particular, for our inability to match the Soviet Sputnik. Popular journals ran series of articles decrying our educational shortcomings in a stepped-up assault on progressive education.

The result was the new movement of curriculum and course revisions and a bewildering array of institutes, study groups, and workshops which produced tons of mimeographed tentative reports and published works. In 1960 Jerome Bruner argued that the question of when to teach what doesn't really matter, since with sufficient "effort and imagination, any topic can be rendered into an honest form that is appropriate to the level of comprehension of students of any age." The application of this idea to mathematics seemed to produce startling results. The same was found to be true of physics and languages. Social studies were next.

A number of current educational innovators urge that students should learn history inductively. Instead of accepting the conclusions of scholars about questions which the student only dimly comprehends, he is given the raw data himself and learns to ask his own questions and to draw his own conclusions. Thus, he will not be asked to learn only a set of facts which will be outdated tomorrow, but will learn a mode of inquiry which will serve him through life. This method stresses an objective that has always been implicit and often explicit: that students should be involved in the processes of history and discover that man's ideas, preconceptions, even prejudices and values change under the impact of events and new conditions. By discovering portions of the past for himself, the student shares in the interest and excitement of discovery. And by discovering for himself sets of relationships, he learns how to analyze other and similar sets of relationships whenever he sees them.

Instead of developing a "new" history for the schools, perhaps teachers and historians should create an atmosphere receptive to change and experimentation with established lines of continuing communication between college and school. Students would then more likely be taught to work at facts critically, analyze them, separate the inconsequential from the important, synthesize, and see the relationships among facts. We should strive to assure students a flexible conception of history. Many students view history as dogmatic truth, fixed and unalterable, because too often it has been presented to them in this way.

The discovery method is not new to the historian. Ever since Herodotus, history has meant inquiry or discovery. It has long been argued that the function of history is not to provide ready-made answers but to cultivate a state of mind for those who desire to find for themselves answers to the current questions which satisfy their sense of reality. The historical method--an educated skepticism--along with detachment, analysis, realism, and acceptance of new ideas--is necessary for the development of any intellectual culture.

Some recent curriculum reformers prefer inquiry, but would organize courses around problem topics or historical crises--not around the inner logic of a discipline. They would relate the knowledge of social science to the student's outlook on life. Otherwise, according to them, history lacks relevance or meaning. Students come to class with social theories already in mind--a fairly stable set of interrelated personal constructs that affect how they react, both emotionally and intellectually, to political and social events. Teaching, then, is shaping, changing, and developing intellectual and emotional orientations already present.

The new historical left argues that the historian should weigh the actions of historical figures on the scales of current moral standards. These historians would have teachers shape students' attitudes on the gut issues of the day. Others claim value shaping is nothing less than brainwashing. But the teacher, by his selection of material, does shape values. The historian's own personality, behavior, and appearance will imply values. He must ever be on guard against dogmatism and presentism.

Historians today are not antagonistic to the old history, treated as one of the humanities. As Nevins says, we must retain the arts of narration, description, and personal portraiture because history is still an art. We must not eliminate the color and drama of history as story. It is fundamentally a dramatic story. We examine the studies of sociologists, psychologists, and other experts and employ them to interpret the past. We are all partners in the search for an enlarged truth.

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POLITICAL SCIENCE

This overview of the discipline of political science will (1) identify the distinctive focus of political science as the study of government and politics; (2) outline the broad scope of political science; (3) identify eight distinguishable approaches to the study of political phenomena; (4) describe briefly some of the research methods of political scientists; (5) present some of the persistent questions with which political science deals; and (6) suggest implications of the elements of the discipline for learning and teaching of political science.

Scope and Emphases of Political Science

Political science is the study of government and the behavior of individuals and groups in relation to government. Modern political science makes use of the other social sciences. It draws as necessary on anthropology, economics, history, ethics, geography, jurisprudence, psychology, and sociology. However much political science may draw on such other disciplines, it has a distinctive focus. That focus is the study of the institutionalization and control of human behavior through governmental structure and processes.

The action and inaction of government affect every member of society. A knowledge of government therefore seems indispensable to man's understanding of the social world in which he lives. In studying political science, the scholar encounters what Pope said was the proper study of mankind--man himself. But the man of interest to the political scientist is a special kind of man--man as a political being.

The major concern of political science in the United States is related to a description and analysis of the structure and processes of the federal system with emphasis on American national government. Political science research studies, books and other publications, addresses by scholars, and course offerings reflect the following areas of specializations.

American government, general
The executive power
The legislative power
The judicial power and constitutional law
The Bill of Rights and the protection of individual liberties
Political parties and activities
Governmental services
State government
County government
Municipal government

In addition to American government, the major areas of political science in the United States are the following.

Public administration
Comparative government
International relations
Political theory and philosophy
Political behavior

Public administration investigates the structures and processes through which policy, as determined by the legislative and executive branches, is translated into programs of governmental action and service. Public administration is concerned with the management of the people's public business.

Comparative government investigates the governmental institutions of different states. Formerly this interest was mainly in the states of Europe, but in recent years it has broadened to include the governments of newly independent states in Africa and Asia. Rarely, however, are the governments studied comparatively. The usual organization is a consideration of the governments of particular states in series, with very little comparison of structure or function. Recent studies in comparative government have begun to emphasize the dynamics of governmental functioning in addition to the description of structure.

International relations shifts the emphasis from the municipal or internal processes of government to the relations among states and issues of international policy. Formerly international relations was largely concerned with aspects of international law and diplomatic relations. With the growth of international agencies, however, much attention is now given to the operation of these practical means of international cooperation.

Political theory and philosophy are concerned with the moral dimensions of government. The approach is normative, not merely descriptive or analytical, and raises such fundamental questions as, "What is the nature of justice?" and "What is the best government?" When the discipline was called political philosophy rather than political science, it was as comprehensive as the study of politics. Today political philosophy is primarily a history of the political thought of former ages.

Persistent Questions Raised in Political Science

Over the years political science has raised various questions which persist in substance notwithstanding change in form. Some of these are as old as man's first conscious attempt to clarify his perception of man's relationships in communities and the nature of political society.

Lipson, in a scholarly monograph that unites comparative methodology with idealism, organizes the core of politics around five major issues. An issue involves alternatives, and alternatives constitute a range of solutions. Hence the ancient as well as the modern state contributes to our understanding of political behavior. The judgment of actual behavior by the moral conscience offers a means to make political behavior more rational. Lipson's five issues, variously stated, are as follows.

1. What are the reciprocal rights and duties of members of the state?

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2. What is the scope or range of government functions?
3. Where is the source of government authority--in the governed or the governor?
4. What is method of organizing authority--concentrated or dispersed?
5. What is the relationship of size and territory to intra- and interstate systems?

This series of questions and the development of sub-questions permit the user to cover many, if not all, facets of political inquiry. Their pertinence may be applied to sub-issues in the United States today. The following questions form some subsidiary issues to the major issues listed in the preceding paragraph.

1. How are the voting rights of Negro citizens to be protected?
2. Should the government provide free food for the poor?
3. How can government officials be held accountable for their management of public affairs, as in military procurement?
4. Can the American people attain their political objectives (whatever they may be) through an increase or decrease of national power?
5. Can the U. S. extend international action through the United Nations without compromising its choice of action?

An alternative set of questions for looking at political life is the following. The designations in parentheses indicate the most likely but not the exclusive approach to answering each question.

1. What are the foundations of the social order? (analytical)
2. What is a state? (descriptive)
3. How did states originate? (historical)
4. What is the purpose of the state? (ethical)
5. How is the state organized? (structural)

6. What is the relationship of the citizen to the state? (structural-ethical) (ethical)
7. What is the relationship of citizen to citizen? (structural-ethical) (ethical)
8. What is the relationship of justice to law? (structural-ethical)
9. What is the relationship of freedom to stability? (structural)
10. How does the government carry out its purposes? (functional)
11. What is the relationship of state to state? (structural-functional)

To the teacher and pupil who are more familiar with the categories of American government than with politics in general, the following questions may be more suggestive of persistent issues raised in the context of th American political system.

1. What is the constitution?
2. What is the general welfare?
3. What are individual rights?
4. What is federalism and the distribution of powers?
5. What is government organization and the separation of powers?
6. What is the legislative authority of the executive?
7. What is the legislative authority of the judiciary?
8. What is the participatory role of the citizen?
9. What is the social context?
10. How are public policies decided?

These questions are much broader than the usual topics found in chapter headings in a text. For example, in both democratic and totalitarian states, there are assumptions about how the citizen participates in the government. Consideration of this idea in turn involves an analysis of the organization and functioning of political parties. Asking the question, "What does the citizen do?" reveals that the citizen in a democratic state often participates no more often than the citizen of a totalitarian state--both have the privilege and duty of periodic voting. But in the two states there is behind this common act a world of difference--the citizen of a democratic state may exercise a choice while the one in a totalitarian state, whether in a newly independent state in Africa or an older state such as Russia, may ratify only the candidates previously chosen by the governing party. In the difference between citizen choice and mere ratification lies an essential difference between democratic and totalitarian political systems.

While there are common and enduring questions in political science, no one set of questions can encompass all the facets of interest to political scientists. The subject and purpose of a particular inquiry determine the questions asked. Quite distinctive content relating to the judiciary emerges when each of the following questions is asked.

1. How did Judge X vote in cases involving right-to-work laws during the period 1955-1965?
2. What decisions were made by Court X involving right-to-work laws during the period 1955-1965?

It is also useful to distinguish between kinds of questions political scientists attempt to answer through research and the kinds of organizing questions used for explanatory purposes in a text. Because an individual has limited opportunities for extensive research, political scientists' questions are usually specific and limited. On the other hand, questions or their counterpart in generalizations in texts are usually used to synthesize an accepted body of knowledge. When textbooks incorporate recent research findings, the new data are generally inserted into an existing organizational scheme.

Concepts* in Political Science

In political science as in other disciplines, there are different categories of concepts, depending on the nature of the reference--denotive and connotative, concrete or abstract, taxonomic or specific. "Constitution" is a more general concept than when embodied in the phrase "Constitution of 1787" or "Articles of Confederation" or "English Constitution." However, the more general concept of constitution develops from a study of the similarities and differences in constitutions, and therefore requires the use of empirical data. Explanation of the concept "constitution" also requires the use of related concepts. Thus a knowledge of the concept "Constitution of 1787" does not require merely simple definitional statement, such as "System of fundamental law for the government of the United States proposed by a convention of state delegates assembled in Philadelphia in 1787 and ratified in 1788." The concept also involves a host of related ideas, such as distribution of powers, federalism, reservation of powers, separation of powers, executive power, judicial power, legislative power, federal-state relations, interstate relations, citizenship, amendment, electoral college, amendment, Bill of Rights, strict construction, liberal construction, states rights, and so on.

Concept learning occurs in association rather than isolation. Concepts constitute an interlocking series of ideas that fertilize each other. The word "constitution" connotes or implies many related phenomena. Democracy, justice, law, representation, authority are but a few of the connotative concepts with which political science deals. Because of the frequent lack of concrete referents, connotative concepts require clarity and preciseness of language.

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*For purpose of this paper, most of the concept application will relate to our American political system.

The need for precise language use is illustrated by the term "power." This concept in American constitutional interpretation requires a series of related concepts to make interpretative distinctions. Here are some of the different concepts of "power" growing out of the structure of American federalism and related assumption about power.

administrative power
congressional power
corporate power
concurrent power
delegated power
distribution of powers
enumerated power
exclusive power
executive power
judicial power
legislative power
limited power
mandatory power
national power
permissive power
police power
presidential power
residual power
reserved power
separation of power
state power

In addition to the common terms of political science there are many proper terms without which it is impossible to interpret or explain political phenomena. The names Hamilton and Jefferson, Buchanan and Lincoln, Hoover and Roosevelt, serve as recall stimuli not only for an individual, but for different points of view and practices of government. To know the functioning of the Supreme Court, as well as constitutional growth, one needs some awareness of landmark decisions. The world of 1970 might be a different world for blacks and whites if the Supreme Court had not limited the Fourteenth Amendment in the Slaughter House Cases, Civil Rights Cases, and Plessy v. Ferguson. Had it not been for these cases, would there have been a need, almost a hundred years later, for Brown v. Board of Education? What does it mean to talk about a Marshall Court, a Taney Court, or a Warren Court? And so it is with other proper terms, ranging from some document or piece of legislation, such as Magna Carta or Fair Labor Standards Act, to more expressive labels such as Bull Moose Party or New Deal. The same is true of individuals who have shaped our political institutions and laws.

It would be impracticable to attempt to list all the key ideas of political science. Yet comprehending political life requires knowledge of many basic terms. Teachers who aspire to help their students to think about government and politics should assist their students to acquire and develop fluency, written and oral, in the use of political science concepts. Students must read, listen, speak, and write in the language of political science if they are to get the messages about government and politics that political scientists are attempting to communicate to them.

Approaches to Political Science

As with other fields of scholarly inquiry, there is not merely one method for examining political phenomena. Approaches include the ethical, historical, structural, functional, comparative, behavioral, and systems approach. None of these approaches excludes another. However, each approach does have distinctive concerns.

The ethical (also normative, Utopian) approach is one of the oldest and most persistent. The classic exemplar is Plato's Republic. It is not concerned with a description of analysis of actual political phenomena, but with the delineation of an ideal state to improve the moral nature of the individual. From this point of view, the subject matter of political science is not so much a study of actual conditions and practices of government, but an ethical examination of the premises that ought to control collective human behavior. The state is regarded primarily as an instrumentality to perfect imperfect man.

The rational basis of the ethical approach to political science has been largely discredited. But when man is oppressed by existing laws or institutions, he seems inevitably to appeal to a higher law than the institutions of man. Thus have rebels against authority, from the Puritans of Scrooby to the civil rights marchers of Albany and Atlanta, justified their acts. The ethical tradition remains a potent force in American political thinking as well as in political action, supported by secular roots in Greek philosophy as well as Judeo-Christian religious thought.

The historical (also cultural or developmental) approach finds early antecedents in the work of Greek and Roman writers, such as Thucidides, Polybius, and Plutarch. The 19th work of the German jurist Savigny presented an alternate to the positivism of Bentham and Austin and firmly fixed history as an enduring approach to the study of political institutions.

Political behavior and institutions, like other social behavior and institutions, change in time. An explanation of change in time involves historical explanation. Thus, history will continue as one of the persistent approaches to the study of political phenomena, in order to illuminate the past and present if not to predict the future.

The historical approach is persuasive because the thesis is simple and the evidence massive. Political institutions are not created, they develop in time; the institutions of today are the product of gradual accumulations and changes through the years. Furthermore, history makes intelligible the special character of political institutions and political behavior. While history on the one hand may appear to preach that the dead rather than the living rule, it also has another message--political decisions are made by men. Political behavior is a historic as well as contemporary phenomenon. The behaviors of Lincoln and Buchanan in the face of the challenge of 1860 are an enduring reminder that not all history is blind, and that man is the center of politics.

The structural approach (also morphological, anatomical, institutional, legal) centers around a description of the legal framework of government. Typically, emphasis is given to the formal aspects of government growing out of the distribution of powers in a federal system between national and state governments, and the separation of powers into executive, legislative, and judicial functions.

A defect of the structual approach is to overemphasize the formal aspects of the constitution while neglecting the social context in which government exists, the process of decision making, and extra-constitutional development. The result often is a static image of political institutions and compartmentalized ideas of government.

Several misconceptions of American government result from literal structuralism--little appreciation of the legislative role of chief executives and judges; an archaic concept of federalism; a neglect of the living as compared with the written constitution; and an interpretation of growth in governmental power and function to reflect the trend toward centralization. As a result, there has been considerable effort among newer political scientists to interpret political phenomena from functional, behavioral, or system approaches.

Political processes, however, function within the context of known governmental structures. Adequate analysis of American government requires explanation of the explicit rules of decision making that grow out of the distribution of powers in a federal system. A study of process without an understanding of the legal institutions through which processes are expressed can lead to a sterility as great as that of literal structuralism. In schooling, the issue is not one of structure versus function; it is how to combine both approaches so that the student obtains accurate interpretation.

The functional approach (also process, physiological, political realism) is to political science what physiology is to medicine: just as the physiologist is concerned with what an organ does and how it interacts to contribute to the health of the body as a whole, the functionalist is concerned with the operations and interrelations of political institutions rather than with their formal structure. The structuralist investigates the legal qualifications of elective officials; the functionalist, how they get elected. The structuralist emphasizes the formal organization of political parties; the functionalist, how decisions are made and who wields influence. In short, the functionalist tries to probe behind the official appearance of things and find out how the government works through men and interest groups.

Functionalism aims chiefly to reveal political and social realism. It attempts to explain political phenomena in the setting of social relations and personal interests rather than to describe an abstract political world. In portraying the living forces of ambitions, desire, greed, courage, and altruism of real men and real events, functionalism imparts to political analysis a dynamic rather than static quality.

Functionalism is thus closely akin to the behavioral school of political science. However, behavioralism is more rigorous in its methods of quantitative analysis and focuses more on individual political behavior.

The behavioral approach (also quantitative, psychological, sociological, anthropological) is closely kin to the functional approach. It is difficult to describe precisely because of the diverse voices speaking in the name of behavioralism. From a methodological viewpoint, emphasis is placed on the collection of empirical data through quantitative research methods, such as the survey sample and voting survey; reduction of data to mathematical quantities; and treatment of data statistically. Behavioralists turn to sociological, anthropological, and psychological categories of analysis rather than to the conventional, core categories of the ethical, historical, and structural political science. Generalizations about group behavior are based on the collection of data about individuals. Much attention is given the development of theoretical political models and the testing of these models by empirical data. In limited time the behavioralist is more concerned with "synchronic" (period) rather than "dischronic" (historical trend) analysis, to use some of the newer terminology.

There have always been empirical elements in political science; the new behavioralism is a matter of emphasis; it is not a new invention. Traditional ethical, historical, and structural-functional analyses, which are as old as Greek and Roman thought, will continue to be practiced simply because behavioralism does not cover the full range of questions that interest political scientists.

At the high school level, Rice's Political Anthropology and Mehlinger's Political Behavior attempt to translate the behavioral approach in political science to school use. At the elementary level, Gibson's Intergroup Relations Curriculum makes a similar effort.*

A problem in all behavioral courses is the neglect of the systematic study of government. Certainly behavioral approaches bring more anthropology and sociology into the school curriculum. Whether they bring more of the analytical constructs of political science is questionable. Mehlinger forthrightly says that his Political Behavior is not a political science course, but a social science course focusing on politics. Application of the behavioral approach to school instruction may therefore be simply a way of organizing an eclectic social science course, not a way of teaching political science.

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*Marion J. Rice, Political Anthropology, Atlanta-Fulton County Public Schools and Anthropology Curriculum Project, University of Georgia, 1968; American Political Behavior, High School Curriculum Center in Government, Indiana University, 1968; John S. Gibson, The Intergroup Relations Curriculum, 2 vols., Lincoln Filene Center for Citizenship and Public Affairs, Tufts University, 1969.

The relatively new systems approach (synthetic, polis, polity, political community), conceptualizes political phenomena and behavior as constituting an integrated system. It contrasts with micro-political studies such as case studies of judicial decision making or surveys of voting behavior. The systems approach attempts to embrace in a macro-political study descriptions and explanations of political behavior in the context of a total political system. Government, law, parties, voting, political behavior, or any other political aspect of society is studied as a sub-system against the referent of the whole political system.

The conception of a political system asks the enquirer to keep in mind the entire scope of political phenomena rather than isolated segments. The concept of political system does for political science what the concept of culture does for anthropology or region for geography: it creates a holistic model in which one attribute of politics is considered in relation to other interacting attributes. Thus it is a synthetic rather than analytical model, is eclectic in nature, and revives the classical concern with ethics as a domain of political inquiry.

Easton's The Political System, a frequently cited source for a systems approach, regards politics as the authoritative allocation of values. Thus the identity of the new with the old political science reasserts itself; behind semantic masks in which new scholars assert themselves lies the persistent and traditional proposition that the study of the governance of man is also a study of ethics.

The comparative approach is one of the oldest traditions in political science. In contrast to the idealism of Plato's Republic, Aristotle's Politics sets forth the nature and characteristics of government according to a taxonomy based upon the collection of data. The essence of the comparative method is accurate observation and description of political structure and behavior. This method provides a basis on which to identify similarities and to compare and contrast differences. The discrimination and analysis of these differences constitute the comparative approach.

Comparison, like the historical method, is a broad methodology with no restriction as to content or sub-approach, such as behavioral or structural. Formerly, however, few monographs were organized on the comparative principle. Most comparative government studies were mini-texts in European government, put together within the covers of one book, without any organization according to comparative principles. These so-called comparisons were no more than simple descriptions. Today comparative methodology has revived the Aristotelian taxonomic approach and combines the analysis of selected political phenomena in the context of significant political systems. Modern comparative studies therefore are closely akin to the systems approach. Comparative Political Systems in the Fenton-Holt series is an example of the attempt to translate for high school use both the comparative and systems approaches using for inquiry a book of readings.*

Greek philosophers of the classic period were keenly aware of the differences in political behavior and structure in Spartan and Athenian cultures and the differences in child rearing required by the different political systems. Education has long been considered by many as what some now call socialization--the process of social conditioning, formal and informal, by which the young acquire the personality, values, and behavioral traits of the group. The analagous anthropological term is enculturation, emphasizing that culture traits are transmitted by the culture. In the past few years the term political socialization has been used by the political behavioralists to identify the idea that the child forms his basic political values and attitudes toward the political system largely outside schools. This approach is relatable to political, civic, and social education and teaching of political values or policy issues.

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*Mindella Schultz, Comparative Political Systems: An Inquiry Approach, Holt, Rinehart and Winston, 1967.

Taking a cue from social psychology, political scientists now study in a descriptive way the process of socialization. Their findings, and those of political science educators, indicate that formal instruction in government makes little or no difference in attitudes about government. Studies of political socialization, from attitude formation to patriotism and loyalty, indicate that the child acquires an identity with his political system without schooling. The political system is inextricably interwoven with the total culture. Community agencies, family and peers, church and school, play group and child organizations--influence the formation of values, attitudes, loyalties, and group identify in many subtle ways.

Oliver and Shaver are the most persuasive educational exponents of value clarification, using a "jurisprudential" model centered around consideration of alternatives about selected public issues mostly within the context of American history. At the elementary level, socialization and affective or attitudinal objectives are still given greater emphasis than are cognitive objectives. It is apparent that the newer approaches to the teaching of political science have little to do with political science as a discipline as perceived by political scientists. Some of the newer approaches are remindful of civic education objectives of the Thirties and Forties stated in present-day terminology.

Varying approaches to the study of political science afford teachers and curriculum makers an opportunity to choose one or more approaches compatible with selected objectives of instruction and their own preferences and resources. Those who have had heavy concentrations in American history may be expected to find suitable content definition and development expressed in the historical and structural approaches. Those who have had more work in sociology and psychology may give more emphasis to the functional or behavioral approaches. All teachers may be expected to make use of the ethical and social approaches, even if not done explicitly or systematically.

The major need is for the teacher to be explicit about the course and his teaching objectives and to fit the approach to the objective. For example, in the usual course in American government, attention is given to the Constitutional Convention of 1787. What is the purpose? Is it to trace the antecedent events which culminated in the covention? Is it to focus on the premises of government held by the nationalists? Is it to look at the vehavior of the delegates as recorded by Madison? In view of time limitations, all of these objectives are often curtailed or even ignored. A historical approach may degenerate into labeling a series of prior conferences without an examination of the social conditions and alternatives available. An analytical approach may involve only an uncritical repetition of the so-called compromises. Behavioral analysis may include no more than a reference to Beard's economic determinism. The specific learning objectives the teacher has in mind, not advance commitment to a particular approach, should determine which approach is used.

Current emphasis in elementary social studies, in theory if not in actual content, is on functional and behavioral approaches. In view of the limited experience of the elementary child and absence of cognitive references, behavioral or functional emphasis may have questionable pedagogic value as well as limited community acceptability. For these reasons some will prefer to continue the more traditional historical and structural approaches in the lower grades with emphasis on the development of political concepts which are prerequisite to political perception.

Research Methods in Political Science

Scholarly study of political science implies the use of research methods. The preceding discussion of approaches referred to some of the types of investigative activity undertaken by the scholars. This section stresses some of the newer, and perhaps lesser known, methods of research in studying political behavior.

Political scientists use written records in many ways--historically to establish a trend; comparatively to ascertain similarities and differences among selected variables; and analytically and synthetically to make new interpretations.

Written records are readily available for political analysis. One of the most easily overlooked is the daily newspaper. This results from a tendency in schools to regard newspapers as sources of current events rather than as commentaries on the culture. If analytical categories are established for newspaper research, an almost endless array of political subjects can be investigated.

The case method in political science makes use of materials arranged according to a very narrow issue or topic. The case method is most frequently identified with judicial decisions. These decisions cover a wide range of public issues, from police practices to fair housing. Judicial decisions therefore offer extensive documentation for case method analysis. Other types of material may also be studied by the case method. In public administration, this method is frequently used to trace the process of administrative implementation in contrast to organizational structure. The case method is often used in legislative studies to give the sequence of events and policy changes affecting legislation.

Quantification is the newest research methodology in political science. This methodology attempts to answer research questions in terms of specific, measurable data which can be expressed statistically. The complexity of the measurements and the analysis range from simple percentages and ratios to analysis of covariance. Quantification requires the selection of supposed key factors or variables. The variables are tangible and specific rather than impressionistic and are selected according to the type of study and the data requirements. Thus political science research using quantitative methods begins where all good research begins--with clarity as to the research questions and relevant data requirements. Quantification, however, is supported by several related procedures.

Data collection has made notable strides in the last decade with the perfection of the techniques of the sample survey, questionnaire, and interview. Initial difficulties in drawing a representative sample, whether in voting or marketing surveys, were overcome with a better appreciation of population variables provided by census data. Errors arising from questionnaire construction and interview techniques have been reduced. Attitudinal studies using scaling techniques have been primarily developed by social psychologists and sociologists. Measurement of attitudes today constitutes a large part of the research in political socialization and value clarification. Training in basic data collection can be carried on in the school context; the members of a class afford a sample for data collection studies.

Data processing refers to the technology of recording data and processing it by mechanical equipment and electronic computers. The four distinct stages in data processing are recording the information, manipulating or rearranging the information, compiling new information from the data, and statistically analyzing the results to produce more new information. Some of the common uses of data processing in political science are in analyzing political attitudes, election projections, election returns, roll call voting, committee assignments, and judicial decisions. It has also been used to establish political variables for national and comparative government and to compile biographical information. Procedures for refined projection of election results have been dramatically demonstrated over television in the last two presidential elections.

Limitations in data processing are less in the machine technology than in human ability to conceptualize significant quantifiable variables. Both the advantages and limitations of data processing are shown in Banks and Testor's Cross Polity Survey. Data processing provides quantifiable data not found in the usual comparative studies, but does not provide the intellectual synthesis found in older comparative studies.

Teachers of political science may be able to gain access to data processing equipment, used for school payrolls and records, to pursue political research questions. Teaching students research methodology of any kind requires involving them in the actual steps of question asking, data collection, and analysis and interpretation. This is true of the older library, documentary methods as well as data processing methods.

One reason for the split between conventional and behavioral researchers in political science is the fact that data processing technology and statistical techniques have had their greatest impact in graduate training in the last ten years. Younger political scientists, who have been exposed to training in computer technology and statistics, have some of the necessary skills to use quantitative techniques. Older political scientists, especially those trained in the conventional methods a generation or longer ago, received little or no training in techniques of quantification.

Political science teachers who wish to use newer research techniques in the training of their students must use these methods in the classroom. This means that such teachers will need some knowledge of computer/technology and statistics.

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PSYCHOLOGY

The Scope of Psychology

Psychology is a science that examines and analyzes the behavior of man and other animals. While the major emphasis is on man's behavior, it is often necessary for humane reasons to use animals for experimental purposes. Inferences about human behavior are often drawn from conclusions of research conducted with other animals. Psychologists do not always agree as to the applicability of such research findings to human behavior. Basic research in any academic discipline need not be immediately applicable to any practical problem, however, so study of animal behavior need not be defended on these grounds.

Behavior is ordinarily defined by psychologists as some activity that can be observed and measured. Included are observation and measurement with tests or other instruments. A person responding to an intelligence test, expressing his point of view on an attitude scale, or salivating in response to a juicy steak is behaving in each instance. Behavior may be conscious, as a quarterback throwing a pass or a student taking a test. In both cases the behaver knows what is occurring to the extent that he can verbally describe the behavior. Behavior may be unconscious; the behaver may be unaware of the nature of his actions. The quarterback who failed to complete a pass may verbalize various excuses without realizing that he is defending his self-esteem. Behavior may also be nonconscious, as the heartbeat or the manufacturing of corpuscles.

In the sense that psychology is concerned with behavior, it has a rather narrow scope. But behavior may be manifested in quite divergent ways that necessitate divergent skills to analyze the behavior. Therefore, perhaps more than other behavioral scientists, the psychologist tends to specialize. While there are two basic orientations in psychology, one concerned primarily with experimentation and the other with clinical practice, within each of these basic areas are relatively discrete specialties. Binding together the widely diverse scope of behavior in psychology are empirical method and the emphasis on behavior. The popular impression of a psychologist as one who helps people adjust to personal or emotional problems embraces only a small extent of psychology.

Some of the major areas of psychology include perception, the nature of learning, human growth and development, abnormal behavior, motivation, personality development, mental health, psychotherapy, physiological processes, sensory processes, and social psychology. These major areas can also include both theoretical and applied aspects. The psychologists interested in perception might vary from the experimentalist measuring the motor coordination of animals reared in the dark, to the educational psychologist concerned with the influence of home environment on a student's perception of academic information. Another possible variation in scope is the extent of emphasis given modification of behavior. The experimentalist may reasonably have little concern about modifying behavior of his laboratory animals, except as might be appropriate to a particular experiment. A clinical psychologist, however, might understandably seek to modify the behavior of a married couple in order that their marriage might endure. In short, if one knows a particular individual is a psychologist there is still relatively little known about how he works or where his interests lie except for the focus on behavior and the inclination to use experimental methods whenever practicable.

Psychology touches upon many other academic disciplines and applied fields, depending upon the psychological specialty. As examples, the clinical psychologist ordinarily works in some agency that is concerned with treatment, whether of juvenile delinquents, mental patients, prisoners, college students or some other such category. Since treatment is the concern, the clinical psychologist is often closely allied with medical specialists. The clinical psychologist may specialize in particular population group, such as children or the aging. Experimental psychologists, depending on their special interests, may touch on genetics, biology, or upon such applied fields as human factors research in which the psychologist cooperates with engineers to design equipment that can be operated efficiently. Social psychology, with an emphasis on attitudinal and public opinion research, touches upon and contributes to other social sciences such as economics and political science. Educational psychologists, of course, have as their central concern applications of those phases of psychology that are relevant to learning, management of students, and other educational factors. Psychology is again moving toward a close association with physiology in its renewed interest in neuropsychology. While psychology may be more limited in scope than some other disciplines, its specialties are sufficiently complex so as to give the effect of a highly diversified discipline.

Characteristics of modern psychology as a social science imply that adequate instruction would deal with more than abnormal behavior, that it is essentially scientific rather than moralistic, and that it does not necessarily have immediate application to the improvement of the quality of the everyday life of the student. While students may learn with profit of human and animal behavior, it cannot be assumed that what they learn will be translated automatically into changes in purely personal behavior, as differentiated from changes in academic behavior. In short, psychology as a secondary school course should not be justified as expected to produce better adjusted or more moral students. The impact of a course, like the school itself, does not necessarily countervail all of the forces that impinge on students.

Basic Questions in Psychology

The fundamental questions in psychology are how and why man and other animals behave as they do. These two questions as stated are essentially unanswerable, but more pointed questions that are subject to observable, measurable, and analytical data for their answers spring from the seemingly unanswerables.

One set of basic questions centers on the stimuli that induce responses and on the responses themselves as they operate in man and other animals. Specific questions in this category can vary widely. For example--How rapidly does a nerve impulse travel in the nervous system of a particular organism? How does an animal respond when it consistently receives an electric shock when it attempts to eat? What physical reactions can be detected when a human tells a lie? What responses occur when external stimuli are withheld from a person? Questions of this category are almost unlimited; the psychologist attempts to ask and answer those that contribute to building theories of stimulus-response interaction.

Another set of basic questions centers on perception. How do we see the world around us and why do we see it as we do? Does each person perceive the world in the same way? If not, why not? Again, examples--What causes individuals to recognize a particular object as green? Does everyone perceive it as green? Why is the same classroom situation perceived as threatening by one student but challenging by another? What is the range of cycles per second to which the human ear is sensitive? How perspective of reality is a person under hypnosis? Again, the utility of a particular question depends upon its contribution to development of a systematic understanding of behavior.

A third category of basic questions relates to growth and development of the organism. Why does a duck follow its mother? Does a monkey prefer an object that feeds it to an object that feels like its mother? What age difference between siblings is most threatening to the older? How is style of parental discipline related to frequency of juvenile delinquency? What is the influence of age on success in various occupations? What variables influence the extent to which aging people disengage themselves from active participation in society? These questions, as those in other categories, vary in the extent to which they pertain to internal or external stimuli to the organism.

Another category deals with intelligence and learning. What hereditary limits on learning exist? What environmental factors inhibit development of intelligence? What variables influence creativity? What physiochemical actions occur during memory? What is the effect of knowledge of results on learning? Does reinforcement or punishment best enhance learning? As teachers well know, the quantity of possible questions in this set is almost unlimited.

Why organisms behave as they do--what motivates them--is a fifth category. Examples of specific questions in this set include--What influence does a physiological need have on behavior? Why does a mother rat care for her newborn? How does a phobia, or unreasonable fear, develop? Why do people who are convinced that smoking causes lung cancer continue to smoke? Is there a level of needs, in which a lower order need must be satisifed before a higher order need may be sought?

A sixth category concerns personality development, mental health and its related processes, and social behavior. Examples are--What patterns of child rearing are related to subsequent adult suicide? To what extent, if any, is a mental disorder a consequence of a biochemical defect? What are the consequences of a particular therapy for a given mental health problem? Under what conditions may a personality trait be modified?

The foregoing categories are arbitrary; others might select a different pattern of classification. The major questions with which psychology is concerned can be fit into one of these categories. The sample questions are intended as illustrations only, and as stated ordinarily are not hypotheses to be tested. Indeed, it is likely that many research studies over a period of years, each investigating one small phase of the problem, would be necessary to answer each question. Also, most answers would not be considered final by psychologists, who are always ready to consider new evidence and more adequate theories.

A secondary school course in psychology should include reference to the major categories of questions, taking care to note that existing theories and their supporting generalizations are tentative. A behavioral science may be more accurately seen as a dynamic process than as a set of factual information.

Chief Methods, Techniques, and Procedures

Psychology, whenever practicable, employs empirical method; that is, hypotheses are generated and tested. In counseling or clinical situations, however, where treatment or assistance is the primary objective, the psychologist may apply present knowledge without direct concern for testing hypotheses Even in applied situations, he would be likely to note the persistent inadequacy of a theory.

Observation and measurement by psychologists provide bases for the inferences they make. How a behaver responds to the various items on an intelligence test is assumed to represent his best effort. We cannot feel the despair or elation of a person being informed of a test result, but we often make inferences from observed behavior. A major difference between the casual observer and the psychologist is the degree of precision of observation and measurement by the latter.

One useful way of categorizing the chief methods of psychology, insofar as its concern involves constructing theory, is into experimental and correlational studies. Fundamentally, the experimental category includes those situations in which behavior of the subjects being studied is subject to rather rigorous control. Experimentation is likely to be appropriate in most studies involving animals other than man. The influence of extreme malnutrition on the learning of rats is one example of an experimental circumstance in which there would be reluctance to use human subjects. Severe malnutrition early in life might have irreversible effects. Human subjects can be used in experimental methods, however. The effectiveness of one programmed learning sequence as compared with another for students of normal intelligence can be determined experimentally while maintaining quite careful control of the experimental situation.

The second of these two categories, correlational studies, observes the relationships between two or more phenomena as they occur in nature. Because the situation cannot be rigorously controlled, correlational studies tend to be less precise and often more difficult to design adequately. They do have the advantage of observing man or other animals in the natural environment.

Each type of study has its limitations. To illustrate, assume that a psychologist observes that children who eat large amounts of candy in early years seem not so intelligent as those who eat less. A correlational study to test his hypothesis would involve comparing one group with the other. Suppose he found the candy eating group actually less intelligent. This would not necessarily indicate that the cause was eating candy, just as the fact that sunburn tends to occur in summer does not indicate that warmer temperatures cause sunburn. Conversely, feeding large amounts of candy to young rats and finding that they do not negotiate a maze so well as other rats might effectively demonstrate that rats are negatively influenced by large amounts of candy--but rats are not people. These fictitious examples are not intended to disparage either method, but rather to suggest the difficulty of conclusively proving cause-effect relationships when rigid experimental controls cannot be imposed on the subjects with whom the psychologist is directly concerned. Fortunately, inferences made by psychologists are often valid.

Many studies by psychologists utilize various types of test instruments. One is the intelligence test. There is first an assumption that human intelligence is normally distributed, that large numbers of people are normal, with fewer cases occurring the farther the deviation from normal. Typically, intelligence tests include items that are found to work; that is, there appear to be observable differences in behavior between those who can or cannot answer items included on the test. Such tests have a moderately high predictive value for subsequent success, especially academic success, of groups of people. For various reasons, they are less reliable both for a single individual, and for tasks not requiring the kinds of skill they measure. Other test instruments can measure with moderate accuracy such factors as attitude, personality traits, predicted success in various tasks such as becoming an effective fighter pilot, creativity, or whether a particular child is mentally retarded or brain-damaged. While tests are perhaps more commonly used in correlational studies, many are also appropriate for experimental studies.

Since a psychologist often may be interested in an individual, the case history method is frequently used. A psychologist concerned with a social deviant such as a juvenile delinquent, for example, might find it helpful to attempt to reconstruct the significant events that influenced his behavior. Also, large numbers of case histories might reveal regular patterns of behavior. A set of case histories of college students who become ill before final examinations might reveal that illness in childhood was habitually rewarded by parents, for example.

Some psychologists use various methods of psychotherapy extensively. In treatment, the psychologist is not an objective scientist in the ordinary sense; he has a specific objective he wishes to accomplish. He does not view his client so dispassionately as he would view the same person on whom he was testing an hypothesis. Research studies the effectiveness of the various methods.

Psychotheraphy, or psychological treatment, can be classified in several ways. Treatment may be applied to symptoms or to causes. Psychoanalysis, inspired by Freud and popularly assumed to be _the_ psychotherapy, stresses understanding causation. It also stresses free association, with the assistance of interpretations made by the psychoanalyst, to bring to awareness the repressed causes for problems. Psychoanalysis is so time consuming and therefore expensive that it is impractical for many.

Chemotherapy, the use of chemicals to influence behavior, is far more common than ordinarily recognized. The alcoholic drink, ordinarily self-prescribed, is the most common, with unsupervised tranquilizers gaining second place. Tobacco, not ordinarily considered as chemotherapy since it is not utilized professionally by psychologists, might otherwise qualify. Under controlled conditions, chemotherapy can be beneficial as part of a total program of treatment, but drugs sometimes have undesirable side effects and do not seem likely to replace entirely other forms of psychotherapy.

Research has not established the clear cut superiority of any method. It seems likely that some alternatives to psychoanalysis are likely to persist simply because of the time and expense the latter involves. Critics of psychoanalysis have also claimed that its cure rate is approximately the same as for untreated medical disorders. Client-centered therapy appears to have the advantage of relatively short time required and the possibility that learning by the client may reduce future problems. Crisis-centered therapy appears to help solve immediate problems, with a reasonably low rate of substitution of new problems for those solved.

Not included for discussion here are particular experimental methods. Their range includes audiometers for measuring perception in hearing, color cameras, devices recording salivation, the plethysmograph to measure vasoconstriction, and various "Rube Goldberg" devices designed by psychologists for particular experiments.

While a secondary school course in psychology is not intended to produce a researcher, some training in fundamental research methods and some practical research experience is indicated. For the same reasons that chemistry or physics cannot be taught adequately without some understanding of the nature of discovery in these sciences, neither can psychology be taught adequately without attention to its research methods.

Major Concepts and Generalizations of Psychology

Behavior is an action or activity of an organism that can be observed or measured. Behavior includes a wide variety of activities, ranging from gross physical movements that can be easily observed to those that are unconscious and very difficult to detect. Psychologists may invent better observational or measurement techniques that enable identifying previously unobserved behavior. The emphasis on behavior in psychology may be distinguished from philosophizing about the nature of an organism.

Stimulus is an inducement to behavior. Stimuli may be simple, as a pin prick, or extremely complex, such as those occurring in a program for teaching inferential statistics.

Response is the reaction of an organism to a stimulus. Again, responses may be very simple or extremely complex behaviors. The concept of stimulus-response has the merit of encouraging empirical analysis rather than philosophy as a basic way of working for the psychologist.

Learning is a change in behavior. A well learned response is relatively permanent; that is it tends to recur in response to given stimuli. Learning occurs through practice, which distinguishes it from other changes in behavior, such as those resulting from maturation. The amount of practice required for learning to persist varies widely among various behaviors. Some behaviors persist more readily, especially clearly physical behaviors such as riding a bicycle. Persistence of behaviors may also be influenced by a perceived need of the learner to retain them. For example, ability to recall a telephone number one does not expect to call again is unlikely to persist.

Theories of learning constitute attempts of psychologists to organize knowledge about learning into a systematic structure. As yet there is no single theory which is generally accepted as completely fitting reality. Most learning calls for multiple responses and is much more complex than the examples of responses above. A basic conflict in learning theories arises over whether learning occurs gradually in a total complex situation or whether the complex situation is a set of particular learnings, each of which has been learned or not learned on an all-or-nothing basis. Much teaching has been conducted assuming that learning is gradual; recently there has been more attention given attempts to identify highly specific tasks to be learned that together constitute complex behavior.

Conditioning is the eliciting of a particular response to a given stimulus by continually repeating the stimulus in a controlled situation. The classic example is conditioning a dog to salivate in response to a sound by presenting both food and sound together. Eventually he salivates in response to the sound stimulus whether or not food is presented.

Operant conditioning differs in that the response is not naturally related to the stimulus. A dog might be conditioned to bark, push a button, and ring a bell in sequence to secure food. Operant conditioning relies on a reinforcement or reward to encourage repeating a response. An undesired response is not reinforced and tends to become extinct.

Reinforcement is an action that increases the likelihood that a response will be repeated. A common example is the praise or attention given the young child as he begins to make noises that approximate language. Other factors equal, the child whose speech is not thus reinforced learns more slowly.

Extinction is an action that decreases the likelihood that a response will be repeated. Extinction may occur from lack of reinforcement, as in the above example, or from an action found unpleasant. A child is likely to avoid the hot stove after only one burn.

Motivation is an incentive to behavior. Motives may be relatively simple, as those resulting from physiological needs such as thirst or the hormone secretion that is related to a mother rat tending her babies. Other motives, such as those related to psychogenic needs, are more complex. Some psychogenic needs are orderliness, aggression, defensiveness, and achievement. As in theories of learning, there is no single theory of motivation which has gained complete acceptance.

Perception is an awareness of a stimulus. In its simplest forms, perception may be an awareness of light, sound, touch, taste, or odor. More complex perception, as of objects or actions, goes beyond simple recognition of the existance of a stimulus to organization of the perception. A viewer of an object thus can describe its spatial form, size, color, and distance from the viewer. In some circumstances, perception may be rather inaccurate. Flyers have difficulty maintaining equilibrium if they cannot see the horizon and must rely on instruments rather than their own sensory perceptions. Perception is selective; a person engaged in a task ignores many stimuli about him. Perception is also related to need; that is, people tend to perceive things or events in ways that they find satisfying or need-fulfilling. In one classic experiment children from economically poor homes overestimated the size of coins while children from affluent homes were relatively accurate. However, a college student may perceive teaching as a suitable career and reject being a sanitation worker at a higher wage. Both examples are consistent with theories of perception as related to need.

Emotion is related to both motivation and perception. Normally, there is an attempt to maintain states perceived as pleasurable and to avoid unpleasant states. Emotion varies as to intensity. It is associated with physiological changes such as rate of heartbeat. Ways of expressing emotion and the intensity openly displayed vary among cultural groups. Crying may or may not occur frequently in public and may or may not reflect grief or pleasure. Members of a cultural group are relatively adept at identifying emotions displayed by a member of that group. In some respects, emotion may be learned. For example, affective tone toward snakes may range from a favorable reaction to utter panic. Suppression of emotion may be physically or psychologically harmful, but the method of displaying emotion may be socially harmful. For example, murder is not usually an accepted method of venting anger in modern society. The frequency with which it occurs appears to vary with cultural factors such as the value placed on human life. The emotional reaction to murder can vary, of course, depending upon the attitudes of the individual and the identity of the victim. Emotions are not restricted to such dramatic events, but are a normal part of everyday life. Without them, life would be drab indeed.

Personality consists of an individual's behaviors that form a pattern of responses to the world about him. Personality makes each individual unique. Personality is strongly influenced by early experiences and is affected also by hereditary traits. Accepted ways of behavior in a particular culture influence development of personality. Each individual also has experiences that are unique to him, and even similar experiences may evoke different reactions from different individuals. Attempts to classify personality types have been rather unsuccessful. Even the popular introvert-extrovert types appear to be extremes on a single scale rather than two distinct types. Personality traits, such as orderliness, can be observed, but they provide only moderately accurate predictions of behavior in particular situations. Ordinarily, personality is relatively integrated but not to the extent that knowledge of some traits of an individual enables accurately predicting his others. In some instances, multiple personalities have been shown to exist in a single individual. Personality is subject to measurement with moderate precision.

Intelligence and other aptitudes are areas of strong interest and practica utility in psychology. Various definitions of intelligence exist. Perhaps the best or at least most defensible is that intelligence is what is measured by intelligence tests. Psychologists do not intend this definition as jest. Tests measure individual skill and speed in performing tasks. Success in performing test tasks is predictive of success in other situations as they occur in real life. Tasks suitable for intelligence tests are those not learned or those for which everyone has had an equal opportunity to learn. Since that equal opportunity is often only theoretical, intelligence tests have been criticized for their cultural bias. Unfortunately, whether culture-fair or not, they nevertheless are useful predictors. Criticism might better be directed as the culture for not producing equal opportunity than at the tests.

It seems probable that intelligence is influenced by heredity, but that development of potential intelligence is affected by environmental circumstances. Personality traits of the individual and social organization both influence the extent to which an individual fulfills the potential of his intelligence. Quite intelligent people may be unsuccessful.

Two individuals with equal intelligence may vary widely in particular aptitudes. One may exceed the other in ability to learn a foreign language, visualize spatial relationships, or react quickly to a given stimulus. Real life tasks vary in the level of intelligence or aptitudes required. Modern society often places a premium on working effectively with other people or on reliability, and such tasks often do not require unusually high levels of intelligence.

Differences between groups of children tend to persist as they grow older, although wide variations in individuals do occur. Some children show substantial gains if placed in a more stimulating environment, which suggests that their potential had been inhibited. There is, however, no assurance that more stimulation will affect the intelligence of a particular individual, which suggests that all are not created equal in intelligence.

Attitudes are predispositions to particular behavior. Attitudes are learned, many being learned relatively early in life. They are relatively persistent and rather difficult to modify. Factual information does not necessarily result in attitude change. Such changes may be partially unconscious but nevertheless may be measured. Attitudes of a given individual tend to be relatively consistent. When inconsistency is recognized, an attitude is changed or new information that creates the recognition of inconsistency is rejected. Teachers particularly find the latter situation frustrating when a student rejects reality because it conflicts with his attitudes.

Conflicts normally face each individual. Often a choice between two desirable or two undesirable consequences must be made, or a decision must be made which is both hazardous and attractive. Anxiety about the decision, avoidance of making the decision, or frustration because a decision cannot be made may result. Serious unresolved conflicts may have serious consequences for a person's mental health.

Frustration occurs when some event prevents an individual from attaining a goal. Two common reactions to frustrations are aggression and apathy. Aggression may be overt, a physical or verbal attack on the source of frustration, or displaced, as in the old story of the frustrated worker who, rather than overtly assail his boss, argued with his wife who spanked the child who kicked the dog who chased the cat up a tree. Presumably the mice should shortly anticipate displaced aggression by the cat. Apathy is an opposite reaction, a withdrawal from the source of frustration. Students who are persistently judged as failures by teachers and who find aggression only creates more problems often demonstrate apathy, even the ultimate in apathy--withdrawing from the source of their frustration upon reaching their 16th birthday. People who cannot cope with a source of frustration may also rationalize, substitute, compensate, sublimate, or use other similar psychological defenses.

Mental health is often an inaccurate term since most mental disorders do not appear to constitute illness. The term appears to have been coined as a means of changing public attitudes away from negative responses to mental disorders. Historically, those with mental disorders were assumed to be permanently affected, a disgrace to family and friends, dangerous, and best locked away as subhuman. Even yet, many mental disorders are viewed by the general public as immoral or dangerous. The male exhibitionist, perhaps even less dangerous to females than the normal male, is likely to evoke highly emotional public responses. Consequently, it is difficult to be unduly critical of the creation of the concept of mental illness and its application to all disorders. Some mental illness is organic, however.

Mental health, just as physical health, is not simply a matter of being either well or ill. Just as many people are subject to occasional minor physical illness, most people occasionally demonstrate a mild degree of mental disorder. Whether particular behavior is classified as acceptable may depend on what society or even what social class the individual is in. And legally, almost every "normal" adult engages in behaviors that are classifiable as abnormal by some standards.

Neuroses are basically extreme manifestations of normal defense mechanisms. Examples are compulsive behavior such as bathing several times daily, phobias or fears that are recognized by the individual as unwarranted, anxiety attacks with physical manifestations such as vomiting, or conversion, the avoidance of a problem by becoming ill. Those affected by neuroses often profit from professional help, even though causation of neuroses is not completely understood.

Psychoses are more serious than neuroses. The neurotic is still attempting to resolve his problems; the psychotic is partly or wholly out of touch with reality. Psychotics appear not to be a type apart, but at the extreme of a continuum, farther from normality than neurotics. There may be genetic predispositions to a particular psychosis. It may be that the concept of mental illness is in fact accurate even though most psychoses are presently classed as functional rather than organic. Biochemical processes may be a factor in mental health LSD produces some of the symptoms of schizophrenia, the most common psychosis. Paresis, once a common psychosis, is known to be organic, a disease in the ordinary sense of the word. Manic-depressive reactions, during periods of mania, may be dangerous to others in that violence may occur. Most psychotics, while they create many problems for those around them, are not dangerous, however.

A secondary school course cannot include all of psychology. Consequently, careful selection of content should be made. Generally, the value of a concept or generalization is related to how much other knowledge relies on first understanding it. For instance, the student who does not understand the concept of behavior is sharply limited as to how much he can effectively learn in psychology. Concepts and generalizations tend to be more useful than the information that supports or explains them. However, this information cannot simply be ignored; rote memory of concepts and generalizations has little value. It is highly important that students learn the importance of valid generalizations and how to use concepts. These provide means of learning psychology long after the course is completed.

Structure of Psychology

Structure, in this context, is the organization of the content of psychology into basic categories. In practice, methodology is integrated into structure; that is, particular methods of collecting and analyzing data are fundamental parts of the various categories. For clearer understanding, however, it is useful to consider structure and methodology separately. Structure does, of course, also suggest the extent of the scope of psychology.

The most basic structural components of psychology may be regarded as academic and clinical. Academic psychology is concerned with creating knowledge which may or may not have immediate practical value. Its emphasis is upon research. Clinical psychology is concerned with helping people solve, avoid, and reconcile themselves to problems. The clinical branch may be regarded as a user or applier of knowledge, while the academic branch is the producer. The academic branch can be regarded as theoretical, the clinical as practical. It should be noted that a particular psychologist is not limited to working only in one branch or the other.

Several strands are common to both branches. One basic strand of psychology is growth and development. Specialists in this area attempt to generate theories that explain prenatal development, the process of maturation, and stages or processes in development such as puberty, sexual development, adolescent subcultures, marital relationships, problems of advancing age, and other similar topics. Practitioners might use the knowledge developed to advise parents, teachers, or others to solve such problems as when to begin children's toilet training or how to cope with disengaged oldsters.

Another strand is perception. This structural unit includes the sensory systems (visual, auditory, etc.), the influence of external factors upon what is perceived, the ways that people organize what they perceive, dreams, the influence of drugs on perception, and similar topics. Psychologists concerned with perception might seek to learn about such diverse topics as what aspects of vision are influenced by damage to particular areas of the brain, why people in particular circumstances are relatively insensitive to pain, why individual photographs projected at suitable speeds give the illusion of motion, the relationship of dreams to reality, and whether a drug heightens the accuracy of perception. Again, much perceptual knowledge from psychology has practical application, as in advising against the use of LSD to modify perceptual abilities.

Individuality is a third strand. This structural component includes hereditary factors, personality, and abilities, including intelligence. Psychologists whose primary concern is with this strand attempt to learn what traits are hereditary, what experiences influence personality development, how abilities influence performance, and a wide variety of related topics. Frequently, practical applications of this strand are related to selecting individuals for particular tasks, as airline pilots, linguists, or people for other tasks which require particular abilities.

Social psychology, another strand, considers behavior in its social context and is concerned with such topics as social class, opinions and attitudes and development of social controls. Practical applications include, in particular, a wide variety of public opinion polls.

Another strand, learning, has become especially significant in recent years. Among the more important areas of learning are conditioning, recall, learning motivation, influences of anxiety on learning, symbology and language, problem-solving processes, and creativity. While practical applications of psychological knowledge of learning have perhaps been unduly limited, the potential impact is vast.

A final strand is the mental health area. Frustration, aggression, neuroses, psychoses, and treatment theories are among the elements within this strand. More knowledge about these exists than is applied, but considerable potential exists.

Structure of psychology, as that of other disciplines, may also be conceived as the basic concepts and generalizations of the discipline. Some of these basic concepts and generalizations have been noted above; however, there is not yet general agreement as to precisely how any discipline is structured.

Trends in Psychology

New breakthroughs in theory, research, and development can have profound effects on trends in psychology. For instance, Binet's development of the intelligence test opened a new area of human behavior to relatively objective measurement and analysis. It also stimulated attempts to measure other aspects of human behavior. Another such breakthrough may shape psychology in wholly unpredictable ways. World events may also shape the future of psychology since psychologists, as other people, tend to respond to perceived problems. Failure to solve world population problems, for example, could result in much more intensive efforts to learn how to better control human behavior than may otherwise be the case.

New interest in physiological psychology has developed in recent years. Biochemical processes offer hope for better understanding of the learning process. Learning more about how organisms function has given promise of creating situations in which they can function more rapidly or efficiently. Interest has developed in biochemical influences upon behavior.

Control of behavior, including the operant conditioning process, is receiving extensive attention. Human behavior is more regular and predictable at present than popular lore assumes. The bus passenger can predict with high accuracy that his driver will proceed to his destination as rapidly as possible and will not stop along the way to pick flowers. Although the example is facetious, it may illustrate the point that behavior can quite often be anticipated in situations other than those in which choices are deliberately given, as in elections. Even in those presumably choice situations, reactions or decisions can often be anticipated if other information is known about how the individual was influenced (conditioned) by environmental circumstances.

The learning process, which in a sense is concerned with controlling highly specific behaviors, has received intensive concern of late. Much knowledge about learning in recent years has been rather theoretical, and some with practical implications has had little impact. Various factors have interacted to produce pressure for concentrating on learning more about the learning process and implementing the new knowledge that occurs.

The study of human factors, which in practice relates to making man more efficient by better designing tools and equipment for his use, has accelerated. Man is an increasingly expensive "tool" and is becoming more critical of being ill-used, so strong efforts have been made to make him more productive and better satisfied.

Mental health, and the clinical procedures for improving it, have received only moderate attention. Urban life and its attendant pressures have dictated a need for more attention. In America, however, whether in reference to physical or mental health, there has been relatively little attention given to prevention of problems as compared with treatment. Many of our traditions are inconsistent with preventive measures.

Psychological methodology is becoming much more effective. Computers have made it possible very rapidly to solve experimental problems that were impractical no more than 20 years ago because of the time they required. The interaction of many complex variables can now be analyzed as a matter of routine.

Perhaps the only long-range projection that is warranted is that psychologists will not, in the immediate future, desire to prevent each man from being unique.

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SOCIOLOGY

The Scope of Sociology

Sociology is both a social and a behavioral science. As such, it is concerned with the social behavior of man. Originally, sociology developed from social philosophy and was conceived to be that science which would study society itself, society being defined as the largest purposeful organization of human beings and, therefore, so far as sociology is concerned, the largest human group. While an understanding of society remains the ultimate goal of sociology, it is one that has prove to be somewhat more elusive in practice than in theory. Relatively few sociologists today study society as a whole, nor are many optimistic about the likelihood of their soon being able to develop significant and scientifically verifiable knowledge concerning society at large. For research purposes society has been broken down into an almost infinite number of smaller groups, including the smallest two-person groups.

While a few theorists maintain traditional links with social philosophy, the main body of sociology has shifted to a position of closer kinship with psychology, with the two disciplines overlapping to form social psychology. Whereas the psychologists are often concerned with the inner workings of the mind, the sociologists are more exclusively concerned with the external manifestations, particularly as they take the form of group behavior. Of all the disciplines, the one most closely related to sociology is social anthropology. Traditionally, sociologists have been concerned with man in modern society, and social anthropologists have concentrated their efforts on man in primitive (pre-literate) society.

Sociologists distinguish between what they are prepared to classify as a "group" of individuals and what they regard simply as a "collectivity," collection, or mass. For them, a group has a purpose. This purpose need not be important, long-lasting, or even well-understood, but it must provide some basis for interaction, that is, for the development of social behavior. Sociology has become the study of human behavior in groups of all sizes from the smallest two-member groups to society itself and, to some extent, the study of behavior as affected by groups.

Sociologists must bring to their task a particular frame of reference that causes them to concentrate on certain aspects of reality while ignoring others. There are at least two basic assumptions for which there is some research support. First, there is the sociologically necessary assumption that group influences do affect behavior. Second, there is the further required assumption that this behavior follows patterns that are discoverable and, ultimately, predictable. Without these assumptions, sociology makes little sense. Since sociologists cannot possibly consider all those factors that impinge upon the behavior in which they are interested, they must be selective. They concentrate, therefore, on those factors that are sociological, or group related, while striving in their research to control those factors that are not. In doing this, the sociologist realizes that some of the factors he has controlled may be of vital importance in their own right. But because they are geographic, economic, political, or psychological in nature, he does not ordinarily focus his research attention on them. Because of his limited focus, he realizes also that the understanding he provides is at best partial and incomplete, for human behavior is complex and multifaceted. It is merely for the convenience of study that such divisions of labor are made between the social or behavioral sciences, and there remains a considerable and somewhat inevitable and unavoidable overlap between disciplines.

The sociological factors isolated by sociologists are conceptualized in appropriate sociological terms. These concepts provide the sociological frame of reference, or the so-called "sociological perspective." They also give to sociology, as we shall see, a basic structure. Ely Chinoy defines the sociological perspective as consisting of those basic concepts regarded as essential to an understanding of sociology as a field of study. Sociological perspective provides the frame of reference that helps the sociologist categorize the phenomena with which he deals.

As a scientific discipline, sociology is both theoretical and empirical. Sociologists attempt to discover relationships between observed phenomena in the social world and to state these relationships in such a way as to try to explain them. Often such theorizing begins with some logical but nevertheless trial and error speculation, or it may spring from a sudden insight. In any case, such speculation has ultimately to be subjected to scientific analysis, for sociology's claim to being a science requires that such speculations be submitted to appropriate empirical tests. Theories must, therefore, be reduced to testable hypotheses, and appropriate data must be collected and analyzed. There is a reciprocal relationship between theory and research, with theory serving as a stimulant and guide for research and research being the means by which theories are sharpened, refined, and extended.

Research findings and supported theories constitute the substantive body of knowledge that sociologists strive to increase. New theories and new research bring about the revision and extension of older theories and research and thereby advance the discipline as more knowledge accumulates. It is the primary responsibility of the professional sociologist, who is essentially a researcher, to contribute towards this end. This is why there is so great an emphasis on research and publications that expose a researcher's reports to examination by his peers.

Because sociology is a science, it should be objective and value-free, or nonethical. To the extent possible, sociologists in their role as scientists should pursue their studies dispassionately and report their findings fairly and objectively and without bias or prejudice. They should be interested as sociologists in what is rather than in what ought to be, keeping themselves free of moral judgments affecting their work and scientific objectivity.

Basic Questions to be Answered by Sociology

The fundamental question to be answered by sociology is, What is the nature of society? This entails the consideration of a variety of related questions. What is the nature of man as a social being? How do men organize themselves in groups and, having organized themselves in such a manner, how do these groups affect their behavior? How is society organized, of what groups does it consist, and which of these are necessary to its being? What forces operate to maintain a society and which to weaken or destroy it? How do these forces come into being and how may they be controlled? What causes societies to change? Many of the most fundamental of sociological questions are the very same ones that have plagued social philosophers since before the dawn of science, and some do not lend themselves readily to scientific answers, given the present limitations of modern social science. This is why some of the more fundamental questions are frequently ignored in favor of those which can more nearly be answered.

In its present state of development, sociology can best contribute toward general education by demonstrating that, despite important and highly significant individual differences, there are important features of human behavior that all men share in common. In addition, it may be shown that some men share more in common than do others and that this may be attributed at least in part to common social experiences. Conversely, it may be demonstrated that many important differences in behavior are likewise attributable to differences in social experience. At root are basic differences in the way of life, or culture, of differing individuals, or in the socialization process to which they have been subjected, that is, in the child-rearing and other learning processes by which they have been introduced to society.

Another important contribution which sociology can make toward general education is in introducing the scientific method. The kinds of questions sociologists ask and the techniques they employ in trying to answer them may be used to accomplish this end. A number of important questions suggest themselves in this connection. What constitutes the evidence for a fact? What is a hypothesis and how is one tested? Sociology seeks to develop generalizations concerning human behavior. It seeks, for example, the causes of war, rather than the causes of a particular war; or the causes of social change, suicides, and other acts of social behavior which may be treated collectively even if, as in the case of suicide, they may in themselves represent isolated individual acts. Again, sociology is a social and a behavioral science, and the questions it asks and seeks to answer are concerned with man's social behavior. As such, sociology uses information which is in many cases the subject matter of no other discipline and treats it in ways that are common only to sociology.

To illustrate the kind of interest a sociologist might have, let us use the family as the basic group to be examined. A question of interest to a sociologist might be the effect family background has on such things as educational plans or career choices. Families may be classified as to their size and composition, as to their racial or ethnic or religious identification, as to socio-economic status, as to whether or not they are rural or urban, or in a variety of ways. The sociologist must then attempt to isolate those aspects of family background which he feels are relevant; that is, which might have an effect on educational plans or career choices. Child rearing practices, attitudes of parents, education and vocations of other family members might be significant factors. Relationships between these factors and differing educational and career plans might be hypothesized within the framework of an attempted theoretical explanation. In general, sociologists are interested in how groups influence behavior. The group may be the family, the neighborhood, the community, a work group, a school group, a religious congregation, or any other group, and the behavior may be of a political or economic nature, normal or abnormal, altruistic or criminal.

Principal Methods, Techniques, or Procedures Used in Sociology to Answer Basic Qeustions

Sociology, as has been noted, is both theoretical and empirical. Ideally, at least, it begins with efforts to explain relationships among the variables to be examined and then proceeds to test these explanations by means of appropriate research. For example, a sociologist may feel that there is a relationship between the type of community in which individuals were reared and their attitudes toward particular social issues. Once the presumed relationships are stated in a theoretical framework, it is possible to devise research to test the theory. In so doing, the first step is for the sociologist to acquaint himself with relevant published literature, both theoretical and empirical, and to make whatever personal observations seem appropriate. With this background, he may then speculate concerning possible relationships among variables in which he is interested and may formulate a theory to be tested.

Important variables must be conceptualized in such a way that they can be readily identified and easily isolated. Presumed relationships among variables are then stated as theoretical assumptions. The next step is to derive testable hypotheses from the theory. These hypotheses are stated as brief statements of presumed fact which must be true if the theory is true. They are derived from the theory by logical processes or are developed in the form of tentative answers to questions logically suggested by the theory. In either case, the hypotheses should serve as the means for testing the theory. If they are comprehensive in their coverage of all logical implications of the underlying theory, testing them should at the same time provide an adequate test of the theory. If the hypotheses are supported, the theory is supported. If the hypotheses are not supported, the theory is not supported. If some hypotheses are supported and others are not, a revision of the theory seems indicated. This is an example of the reciprocal relationship between theory and research.

Classical theories of the past do not lend themselves to the kind of testing outlined here, which is why many of them have been rejected as inappropriate to a science. For the most part, they were speculative, differing little from the speculations of social philosophers. Movement away from theorizing at such a level has been described by Robert K. Merton as settling into a "middle range," that is, theories from which testable hypotheses can be derived and which generate research. The move has been from macro to microsociology. Empirically-oriented sociologists have adopted the physical sciences as models and have adapted their techniques, quantifying data whenever possible and submitting it to statistical analysis. The development of modern high speed computers and of highly sophisticated statistical procedures utilizing the capabilities of these computers through complex program development have given impetus to this trend. The availability in recent years of increased governmental and foundational support for research has also been a contributing factor making feasible the collection and analysis of massive amounts of data.

Once a theory has been developed and hypotheses derived and stated in such a way as to provide the basis for research, the next step is to develop an appropriate research design. If, as is usually the case, the theory purports to explain certain aspects of the behavior of a given group of individuals, it becomes necessary to identify the group of individuals to be studied. This group becomes a "population." Instead of studying the entire population, it is customary to sample the population. Various sampling techniques may be applied, thereby reducing the identified population to manageable proportions.

A random sample may be selected. This is a sample taken in such a way that every member of the original population had an equal chance of being selected. Drawing names from a hat is a simple means of drawing a random sample of a small group. Sometimes, to assure adequate representation in the final sample of identifiable elements in the original population, the population may first be stratified and then sampled. For example, it may be important to have in the sample the same proportions of whites and nonwhites, or of males and females, or of various age or employment categories, as in the original population. Gallup, Roper, Harris, and other polls are usually based on random samplings from stratified populations. Another technique is to match people two by two and sample one member of each matched pair. Once a population has been identified and sampled, means must be developed for collecting relevant data.

Direct observation is one means of collecting data, but it poses a number of difficulties with respect to control and in maintaining a proper degree of precision in reporting the observed behavior or other phenomena. Interviews are a frequent means of collecting data. Again, there are the problems of control and of reporting. If so-called open-ended questions are used, to which a respondent may reply freely, answers must be classified by use of some coding technique, which introduces certain inaccuracies of interpretation and of classification. If forced choices are used, the respondent is restricted to a limited set of possible answers. This may introduce error into the research. Where questionnaires are used instead of interviews, the same possibilities of open-ended and forced choice questions are available and so are the same possibilities for error, including the possibility of receiving false answers. Returns from questionnaires are less numerous than from interviews, assuming that the interviewer is able to interview intended respondents, but the cost factor and the time factor both favor the printed and mailed questionnaire. Anonymity can also be more readily guaranteed with a mailed questionnaire than in the case of a personal interview, but clarifications cannot be sought and techniques for eliciting responses cannot be employed so readily. It is difficult to say whether respondents are more likely to give truthful answers to an interviewer or in answering a questionnaire. Another source of data is in published records such as a census, legal records, school records, or other statistical compilations. In fact, sources of data are limited only by the ingenuity of the sociologist, who may do content analyses of written or spoken words, films, photographs, paintings, and advertisement layouts, develop elaborate games or socio-dramas, or otherwise generate usable data.

Whatever data are collected should be relevant. They must relate logically to the hypotheses being tested and must be of such a nature and collected in such a manner that they can be subjected to appropriate analyses, which will provide a fair and adequate test of the hypotheses.

Analyses must be planned in advance and must be objective. These very often involve the use of statistical techniques. It is important that these techniques be the best and most appropriate ones available and that they be applied properly and to an adequate sample. Findings must then be fairly stated and generalizations confined to the population sampled.

Cautions should be raised against the misuse of research findings. Overgeneralization is perhaps the most frequent error. It should be emphasized that findings apply in the strict sense only to the population sampled. If Atlanta teachers constituted the original population, there is no basis for generalizing findings to include teachers elsewhere in Georgia. Another common error is to interpret correlations as demonstrating cause and effect relationships. They do not. They simply indicate that two things vary together, with neither necessarily being the cause of the other. Both may result from a third factor. Also, it should be understood that most problems are multidimensional. The research sociologist usually confines his attention to a limited number of selected variables, controlling the others or ignoring them in his analysis. The result is a partial explanation of the problem, not a comprehensive analysis. Many factors may go unexplained, including some which may be essential to the resolution of the problem. These may or may not be sociological in nature. A distinction must be made between necessary and sufficient causes of a particular result. If the result is never obtained without "X," then "X" is a necessary factor. If, on the other hand, "X" can be shown to be present or to have occurred, as the case may be, without producing the expected result, then "X" is not a sufficient cause. Finally, it should be noted that sociologists deal in probabilities. If a thing has a fifty-fifty chance of occurring, it may well occur simply by chance. If it happens nine times out of ten, it is unlikely that it occurs merely by chance.

One must always allow for the chance occurrence, however. Even if a thing does not occur 99 times out of 100, it must be remembered that 1 time out of 100 it does.

Key Sociological Concepts

There are numerous basic concepts in sociology. Only a few are identified here for illustrative purposes. The brief comment on each only summarizes and is not intended to be a full explanation.

Group. The social group, or sociological group, is the basic unit with which sociology is concerned. A human group differs from a mere collectivity of individuals in that it has a purpose, or function. Groups vary in size from the smallest two member groups to that largest of all groups, the human society.

Primary group. A primary group is ordinarily a group of limited size and is one that is characterized by frequent, intimate, face-to-face contact and interaction. The family is a primary group. Two persons constitute the smallest primary group.

Secondary group. A secondary group is ordinarily larger than a primary group. Contacts and interaction are less direct, frequent, or intimate than in a primary group. A society is the largest secondary group.

Society. Society may be defined as the largest purposeful human organization. A society exists in a more or less defined geographic space and through generations of historic time. Strictly speaking, a society should have a comprehensive culture, which is to say that it should be capable of meeting all human needs. By definition, therefore, it should also be independent, that is, capable of existing without dependence upon any other society. Western Society, beginning with the Greeks and Romans of classical antiquity and continuing to include all modern Western nations, is a society in the fullest and truest sense. American, British, Germanic, Hebrew, French, Irish, Polish, Scotch, and other "societies" as subsocieties have operated within Western Society. A society consists of an almost infinite number of subgroups, including all of the families and two-person primary groups that make it up.

Culture. Culture includes all of the knowledge that man may learn as a member of society. Culture includes nothing that is biologically inherent. It must be learned. That control which man learns to exercise over his biological needs is, however, a part of culture, as, for example, eating three meals a day to satisfy the biological need for sustenance. Culture varies in particulars from one group to another. There are within a societal culture usually a number of identifiable subcultures. Within American culture, which is a subculture of Western culture, there are numerous other subcultures.

Norms. Norms are established standards of acceptable behavior. Collectively they define a culture or subculture. When requisite norms have been internalized as guides to behavior, one may be said to be socialized.

Mores. Mores are those norms that have strong moral support and which, if violated, may result in sanctions being imposed.

Socialization. Socialization is that process by which man learns his culture so as to take his place in society or within a subgroup in society. Since socialization takes place within these subgroups, members of the same society may be subject to differential socialization resulting from differing subcultures and differing norms.

Status. Each individual is a member of numerous groups. Within each group of which one is a member, he occupies a position. Positions may be either ascribed or achieved, depending upon whether or not one is merely assigned to a position without effort on his own part, as in the case of being male or female, or has come to the position because of his own efforts, as with the positions of physician or lawyer. With each position there is associated a certain status, which has to do with one's rights, prestige, or potential for action. Status is commonly regarded as the passive aspect of one's position.

Role. In addition to status, there is associated with each position a related role. Role involves responsibilities and is the more active aspect of one's position. In performing a role, one exercises those prerogatives defined by his status and meets the obligations of his position, as defined for the role. Appropriate behavior for every position is outlined by a set of related norms that must be learned as a part of the socialization process by which one learns one's status and role.

Social institutions. Social institutions arise in connection with the need for satisfying and at the same time controlling basic human needs. Basically a society is made up of social institutions which are defined by clusters of related norms specifying acceptable behavior in such important areas of human behavior as reproduction and child-rearing, allocating of resources, gaining a livelihood, or organizing for purposes of mutual protection, education, and worship. The family, the economy, the political state, education, and religion are all examples of major social institutions. Sociology, as the study of society, is organized in part along parallel lines. There are the sociology of the family, of education, and of religion, to name a few examples. Within each of the major social institutions there are important positions with associated statuses and roles--father, mother, businessman, senator, teacher, and minister.

Social stratification and social classes. Societies are commonly regarded as being stratified along socio-economic lines, so that specific socio-economic classes may be identified. Ordinarily, there are presumed to be three general social classes--upper, middle, and lower. Each class is regarded as a subgroup within society, and each is generally assumed to constitute an identifiable subculture that affects behavior in significant ways because of differential socialization. Racial and ethnic differences further complicate the situation.

Manifest function. Every sociological group has a purpose or function. Frequently, the same group will have more than a single purpose or function, but usually one of its functions is primary. A manifest function is a function for which a group has been organized, formally or informally. Sometimes groups come to function for reasons other than those for which they were organized, with new functions being substituted for old or being merely added.

Latent function. A latent function is one which a group serves without its being manifest. For example, colleges are organized primarily for educational purposes or functions. They also serve a number of other functions, including that of being places in which individuals meet potential future mates.

Dysfunction. A dysfunction is a malfunction, a function that interferes with the basic purpose of a group. A latent function may become a dysfunction if it interferes with a manifest function.

Structure of Sociology

Recent years have witnessed popularization of the idea that every academic discipline has an identifiable structure and that this structure is what should be given primacy in teaching introductory courses in any discipline. For some, structure seems to be made up of basic concepts or generalizations essential to an elementary understanding of a particular discipline's content and to all further learning in the field. In sociology, what we have identified as the sociological perspective would be closely akin to what Bruner calls structure. In short, it consists of those concepts regarded as essential to a basic understanding. Apart from this, it arises from the structure of society itself, with branches of sociology developing in connection with each of the major social institutions.

Alex Inkeles, after a review of various sources, outlines the subject-matter of sociology in four categories as follows--(1) sociological analysis, which includes an introduction to society and culture, to the sociological perspective, and to the scientific method; (2) primary units of social life, which includes a consideration of social acts and social relationships, the development of the human personality within a social context, primary and secondary groups, and the society as a group; (3) basic social institutions, such as the family and political, economic, religious, and educational institutions; and (4) fundamental social processes, including socialization, social stratification, social control, and social change. Most of the significant questions of sociology can be classified under these headings, as their answers would contribute toward knowledge in one of these four basic categories.

If we look at the group as the basic unit with which sociology is concerned and take the smallest group, one of two members, we immediately see that it can be further broken down into two identifiable positions, each with an associated status and role. The statuses and roles may be further reduced to those norms that define them. The norm, then, may be regarded as the smallest unit with which sociology is concerned. Building back the other way, we see that norms define roles and that clusters of related norms likewise determine social institutions, with which are associated significant positions and which depend upon the performance of specific roles for their continuance.

The family may be taken as an example. There are norms which define the duties of both parents and which outline the roles of father and mother, the two principal positions. Satisfactory performance of these roles is essential to the proper function of the family as a social institution.

Collectively, major social institutions such as the family, religion, the economy, the political state, and education make up the framework of society. They are not the whole of it, however. All the social institutions and society itself are cross-cut by social classes. Although they may be said to be institutionalized in a sense, they are not institutions in the same sense that the family and the political state are social institutions. Other important groups exist independent of particular social institutions. Racial and ethnic groups are two examples, although there may be a relationship between certain of these groups and some institutions. Just as the major social institutions do not constitute the whole of society, neither do those branches of sociology associated with the major institutions constitute the whole of sociology. Only one of the four basic sociological headings previously considered concentrated on social institutions. Others covered sociological analysis, primary units, and fundamental processes. To the extent that the four general headings listed are comprehensive, it may be said that they provide a kind of structure. Alternatively, the kinds of questions which sociologists ask provide a kind of structure.

Those materials that are being prepared for secondary-school use in the teaching of sociology by the Sociological Resources for the Social Studies Project of the American Sociological Association do not rigidly adhere to any carefully conceived idea of structure. At the same time, they do not depart sharply from the structure suggested here, which is based on the basic concepts of the sociological perspective. Basically, it is a structural-functional approach, which is the one a majority of present-day American sociologists follow.

A teacher introducing students to sociology should emphasize basic concepts in general use and the relationships among these concepts. This is to say that some kind of structure must be taught. To say that the student must be provided with the sociological perspective is to state much the same thing in other words. A student who has completed a beginning course and cannot define such concepts as "norm," "role," and "social institution" in acceptable terms and who does not know the relationship between, say, a norm and a role has not learned very fully. If he can define these concepts and he does know the relationship of one to the other, he has been taught structure at even a rudimentary level. The completeness of his knowledge, the subtleties with which he is acquainted, and the level of sophistication achieved are additional concerns.

Sociological Trends

Modern American sociology has become less speculatively theoretical and more scientific, with increasing emphasis on empirical research. The so-called structural-functional school of thought has become dominant, although the structural-functionalists are often bitterly criticized. Robert K. Merton's synthesis of what he has called theories of the "middle range" and empirical research has been widely accepted, but the trend has been toward micro as opposed to macro-sociology. Research funds and computer assisted statistical analyses have contributed toward this trend.

The conceptual scheme of the structural-functionalists provides a basic structure of perspective with which every student of sociology ought to become acquainted. Theories based on this scheme are common in the literature, and research problems are conceptualized in these terms. Journal articles in the more sophisticated sociological journals presuppose a knowledge of the basic concepts and their relation to one another.

More emphasis has been placed in recent years on the teaching of sociology at the secondary school level. The American Sociological Association has two relevant committees, one on curriculum and one on teaching, and sponsors a project financed by the National Science Foundation, Sociological Resources for the Social Studies, which is currently producing materials, including a course, for secondary school use.

Modern sociology has much to offer the student in the way of contributing to a useful and meaningful general education, provided only that it be properly taught. Our most pressing problems are essentially social problems. Our most important decisions are those concerning social issues. Improved instruction by increasing numbers of better qualified teachers seems essential to meet the needs of a troubled society.

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MULTIDISCIPLINARY SOCIAL SCIENCES

Social sciences form a scholarly field consisting largely of distinctive, though related, disciplines characterized in the preceding sections. Yet there are elements and aspects of this broad area of scholarly investigation and knowledge that overlap, duplicate, closely interrelate, or even extend beyond the dimensions of the social sciences. It is these interrelating components of the social sciences with which this section is concerned. Consideration is given in turn to the scope, basic questions investigated, structural nature, key concepts, chief research methods, and current trends of multidisciplinary social sciences.

Of all areas of the social sciences, the multidisciplinary components and characteristics seem the most diverse, diffuse, variable, and unsettled. These traits are reflected in the varying terminology used by scholars in referring to "multidisciplinary social sciences," a phrase which literally denotes that the field contains more than one discipline. Sometimes, however, that phrase appears as a synonym for "interdisciplinary" which otherwise often refers to the interrelatedness of two or more of the disciplines. "Cross-disciplinary" appears less frequently (and with possibly even more variation) although it finds some use as a synonym for interdisciplinary. Some scholars speak of "integrated" or "unified" social sciences, though individual advocates and analysts vary considerably in their specification of components that are disciplinary or "extradisciplinary", that is, extending beyond the scope of the disciplines. And the term "social science" is suggested by some to identify an integrated or unified approach, though its wider use seems simply to be as an adjective referring to the social sciences collectively.

While such varying terminology may at times mislead or confuse especially those outside the field, social scientists generally seem much more concerned with other issues, problems, and even other terms. In this section the phrase "multidisciplinary" is used as the umbrella to cover the overall, the disciplinary, the interrelated, and the extradisciplinary elements of the social sciences. In totality the social sciences are multidisciplinary; that is, the field is composed of many disciplines. It is also composed of interdisciplinary and perhaps extradisciplinary elements, ones that are not individually classifiable into the major disciplines.

Teachers and curriculum designers who note the recurrent contention over "social sciences" versus "social studies" as a designation for that field in the school program will find little basis among social scientists for a favored term. If school personnel wish to indicate their recognition of the school's distinctive purposes as different from those of research and professional training in social sciences, they may--but need not necessarily--choose to use the term "social studies." Both terms denote a field that is multidisciplinary, interdisciplinary, and possibly also extradisciplinary in its broad range.

Basic Questions in Multidisciplinary Social Sciences

The fundamental questions of multidisciplinary social science are similar to, and indeed inclusive of, many of the queries to which scholars in the individual social science disciplines seek answers. Thus, in interdisciplinary investigation, the social scientist pursues evidence that will hopefully help to answer such questions as the following. What actually happened (in an event or process)? What were the chief components of a selected situation or activity? Did they vary among individual units, and if so, how and how much? What forces or influences brought about the situation or action? What were the main results and how significant were they? How were the components related to each other, to the influencing forces, and to the results? Does the event, process, or situation possess elements of consistency, repeatability, or uniqueness?

Despite their similarity, questions in the multidisciplinary social sciences do stress some lines of inquiry that at times extend beyond those in individual disciplines. In multidisciplinary investigation there is apt to be more attention to bidisciplinary or to broader aspects of a question. The consideration of time may be expanded to historical dimensions. Interrelations with physical as well as other human elements may more likely be considered. In short, the range of aspects dealt with in a multidisciplinary approach extends beyond that in the more limited scope of investigation within a discipline.

Multidisciplinary social sciences also involve more inclusive concepts and broader questions. Multidisciplinary emphases include entire social systems, total societies, and multidimensions of human behavior. Individual investigations are, of course, relatively limited. But the social sciences collectively, including interdisciplinary components, deal with specific questions that relate to such inclusive queries as the following (oversimplified here for purposes of brevity). What is society (civilization, or culture)? What are its chief components? How are they related--for example, conflicting, reinforcing, neutral, disassociated? How can they be variously viewed (approached, investigated, and understood)? What are the relative validity and reliability of each of the alternative ways of studying them? How are the broad elements related to more specific ones? How do they relate to the larger social unit or sphere of which they are a part? What forces influence or hinder them? How do they function? What are their effects?

How do they relate to more inclusive trends, movements, processes?

It is not merely, and some would say mainly, the kinds of questions, but it is the ways in which answers are sought that distinguish multidisciplinary investigation from that in particular disciplines. The general approach in multidisciplinary pursuit of knowledge is to utilize various pertinent channels or avenues of inquiry. For many questions about society, more than one discipline can contribute useful answers. Discussion of procedures and techniques in research continues in the latter part of this chapter.

The broad types of questions and routes to answers in multidisciplinary social sciences can be related to instruction in schools. In teaching a course that deals with one subject, students may be encouraged to recognize its incompleteness by becoming aware that other subjects are also concerned with some of the same matters. And students may consider, too, the greater difficulty, the larger resources required, and the increased complexity in dealing with inclusive questions. Perhaps it is an extreme reminder that any person can in ignorance furnish ready "answers" to broad questions that astute philosophers may ponder for fruitful but unfulfilled lifetimes.

Scope and Emphases of the Multidisciplinary Social Sciences

Social sciences constitute one of the fundamental fields of human knowledge. Other broad and basic fields most widely recognized are the humanities and the natural or physical sciences. Such classification reflects both the inevitable interrelatedness of human knowledge and the unavoidable inadequacy of any single way of classifying it. Still, the superabundance of human knowledge demands, for practical use, some kind of classification. There are practical if not theoretical limitations to what researchers can encompass, teachers can know, and the students can learn. Further, the changing content and even organization of knowledge eventually destroy the value of a temporary or only approximate map. But a charting of some framework of human knowledge, to which the social sciences contribute and within which they function, can be of suggestive value. Two such charts appear here.

Status of the social sciences. Eight recent books by leading social scientists on multi- or interdisciplinary social sciences, as well as six other books that attempted to deal inclusively with the field, plus the new International Encyclopedia of the Social Sciences, were valuable in preparation of the first chart. Those authors, however, mostly expanded rather than condensed their interests, approaches, or outlooks into compact form.

The chart attempts to illustrate relative locations rather than fixed positions for academic disciplines and extradisciplinary elements of the social sciences plus a few segments of other areas of human knowledge. Such locations reflect the tendency of some disciplines to overlap extensively portions of both the social sciences and either the sciences or humanities. Yet even this recognition is incomplete as each of the social sciences ranges variously from fact-finding to theoretical or even speculative elements. Economics includes, for example, both mathematical and philosophical elements as well as other components. Readers will likely identify other listings on the chart that they would consider more properly placed either somewhat more toward, or spread out into both, the chart's left or right (the humanities or the sciences) than as shown.

The 20th century trend of the social sciences toward the empirical, or inductive, sciences is seen in the position of history as almost the only major remaining tie between the social sciences and the humanities. Whether this trend is desirable is not at issue here. The basic forces that determine subjects or research in the social sciences lie largely beyond schools (including colleges) and requirements of the curriculum. The chief point here

SOCIAL SCIENCES

Humanities — Sciences

(RESEARCH AND ACADEMIC)

Literature — HISTORY (interpretive, empirical) — ECONOMICS — GEOGRAPHY (human, social or cultural) (physical or natural) — Meteorology

Geology

Language(s) — POLITICAL SCIENCE — Environmental Study

Genealogy

Drama — International Study (organization and relations) (regions and cultures) — Ecology

Philosophy — SOCIOLOGY

ANTHROPOLOGY (cultural) (physical)

Art — Value Analysis

Systems Study

behavioral sciences

Music — Jurisprudence — Communications Study — Biology

Education

PSYCHOLOGY (human) (animal) — Statistics (mathematical)

(TECHNICAL, APPLIED, PRACTICAL)

law
policy and planning
(community, national, industrial)

public administration

law enforcement
business administration

labor relations
finance, investment
tourism
politics

public relations
social work

clinical psychology

consulting and advising
(business, government, organizations)

archives, museums, exhibits
social action/movements/causes
foreign relations
communications

is to emphasize the extent to which social sciences have developed under the influence of growing scientific, technological, industrial, and other popular forces.

Perhaps a useful example of difficulty in classification is the discipline of education which, as an academic study (rather than as professional training), is in large part a social science. This is readily evident from recognition of the history, philosophy, sociology, and psychology of education. During the past decade or two the anthropology of education and even an economics and politics of education also have emerged as research areas. Yet the study of schooling (formal education) particularly reflects in considerable part the practices studied. And whether education is a science or an art remains unsettled.

Special attention is invited to the interdisciplinary elements that appear on the chart. While they do belong to, or partly to, the social sciences, any one of them defies classification under just a single discipline. International study, for example, receives attention in at least political science, geography, anthropology, history, economics, and sociology.

The chart also includes some reminders that the social sciences relate rather directly to a variety of technical, applied, practical, vocational, or professional practice areas of human activity. The closeness of relationship is evident in the fact of training programs for several of these areas offered in, or in association with, social science departments of many colleges and universities. And, indeed, many individuals with a strictly academic major and lacking specific career training do engage in some of the applied areas. The areas shown on the first chart may suggest to secondary teachers that, although their school level is generally not considered proper for vocational preparation in these areas, the secondary schools can serve a prevocational function for both academic and applied social sciences.

The second chart is an attempt to identify structural elements of the major social science disciplines. Horizontally each of several aspects is illustrated for the disciplines. In vertical columns each of the recognized disciplines is characterized in several respects. Together these exemplify components of a pattern composing the social sciences. In presenting the broad scope of the social science disciplines on this scale, many meaningful and important elements are necessarily omitted. But if the elements depicted are viewed as sample focal points, some distinctiveness of each social science discipline becomes apparent.

Teachers and curriculum planners may find this chart helpful in visualizing the extent to which a curriculum is multidisciplinary. It can also be useful in curriculum development as a reminder of varying elements that may be arranged into a structured sequence. If sufficiently representative, such a curriculum can help students begin to sense the patterns of social interrelations that the social sciences seek to identify and explain.

Interested readers may develop their own designs, layouts, charts, or representative relationships among major components of the social sciences and beyond. The charts presented here have more value in their suggestive framework illustrating some apparent interrelationships among various main components than for complete coverage or consensus among the social sciences.

Development of the social sciences. The multidisciplinary nature of the social sciences has a long history. Early origins in western civilization are evident in the ancient Greek beginnings of history and geography by Herodotus and Strabo. While those individuals were scarcely conscious of founding such long-lived disciplines, neither did they consciously establish rigid boundaries for them. Each of these ancient scholars readily incorporated elements that in more recent times would be attributed to the sister discipline.

SOME STRUCTURAL ELEMENTS OF THE SOCIAL SCIENCE DISCIPLINES*

DIMENSION	GEOGRAPHY	ECONOMICS	POLITICAL SCIENCE	HISTORY	ANTHROPOLOGY	SOCIOLOGY	PSYCHOLOGY
Focus	Environment	Goods and services	Governments and leaders	Significant events, trends	Culture traits and artifacts	Group relations	Individuals
Data Sources	Realia: -nature -people -artifacts	Commercial activities: -trade -labor -finance	Governmental: -agencies -courts -legislatures -parties	Heritage: -records -relics -folklore	Culture: -ethnic groups -mores -values	Society: -classes -institutions -groups	Personalities: -behavior -development
Organizing Approaches	Physical to cultural	Mathematical to management	Historical to behavioral	Documentary to philosophical	Archeological to philosophical	Statistical to humanitarian	Laboratory to clinical
Methods	Areal description to systematic analysis	Macro-to-micro analysis	Behavioral to institutional analysis	Empirical to interpretive analysis	Participant observation to comparative analysis	Demographic to ecological analysis	Experimental to descriptive analysis
Range of Concerns	Near to remote	Subsistence to prosperity	Small club to international assembly	Present to origins	Primitive to technologically advanced	Small groups (family) to large groups (ethnic)	Causes to treatment
Relational Emphases	Spatial relations: -dispersion -accessibility -isolation -convergence	Economic processes: -production -distribution -consumption	Political processes: -administration -legislation -adjudication -politics	Temporal relations: -discovery -continuity -rise -decline	Cultural processes: -enculturation -acculturation -decay -technological advance	Social processes: -organization -disorganization -socialization -mobility	Personality and actions: -conformity -deviance -role assumption -development
Human Goals	Environmental balance	Satisfaction of wants	Order and participation	Group awareness, destiny	Cultural development	Social betterment	Maturity and adjustment

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*Based on a similar chart by Robert N. Saveland.

Europe, birthplace of both the ancient and the newer social sciences, has seemed also more hospitable to interdisciplinary study. In higher education, at least, the European tradition of breadth in liberal arts still influences scholarly preparation and performance. In Europe more than the United States, it is common to find interdisciplinary flavor in the fusion of pairs of disciplines at least--historical or economic geography and political sociology, for example. By contrast, American disciplinary boundaries, though not impassable barriers, seem stronger among the social sciences. Perhaps this difference reflects chiefly the greater dominance of specialization in American than in general European life.

Quite possibly, too, the 19th and early 20th century struggles of the newer social sciences to gain residence in academia help to account for their sometimes seeming self-preoccupation and attempted exclusiveness. However they may have been in the past, the social sciences in mid-twentieth century America individually exhibit definite interdisciplinary tendencies. That is, each of the still growing social sciences broadens into related disciplines as well as deepens into its own special sphere.

Broadening of a discipline leads frequently into its contact with and overlap into other social sciences. Geography is perhaps the clearest if not necessarily the fullest example, with economic, political, cultural, and historical aspects as established sub-divisions. Political history has remained while economic and cultural history has advanced, and some scholars have begun to pursue such avenues as psychological and even psychiatric interpretations of history. Sociology has extended into economic, political, and environmental institutions and relationships. Some political scientists have ranged into the exercise of power, control, authority, and governance in various institutions and groups well beyond government and political parties. Thus, even if it were ever true that social science disciplines were once individually narrow, it is certainly no longer so. Though schools may in some cases treat a subject narrowly, the social scientists who collectively specialize in that discipline treat it broadly. Its breadth is, of course, composed of a range of sub-specialities, some distinctive and some overlapping, each pursued by individual scholars.

Implications for schooling are readily evident. A teacher who knows a subject well knows it broadly as well as in selective depth. No really thoroughly prepared teacher, then, would treat a discipline narrowly. Yet he would understandably emphasize its distinctive approaches, characteristics, and contributions as well as its relatedness to other subjects. Quite possibly it is impractical for an individual teacher to become well prepared in more than one of the social sciences. Through it, however, he can frequently contact related elements of other disciplines in the field.

Structure in Multidisciplinary Social Sciences

What are the major components of scholarly and multidisciplinary investigation of society? How are they interrelated, organized, structured? That is, how do they function in relation to each other? Some, but still incomplete, answers to these questions have been suggested in the introductory portion of this section by means of charts and commentary. Here the analysis is extended in order to pinpoint more specifically sample areas of mutual concern among the social science disciplines. Despite their tentativeness, incompleteness, and lack of status among some scholars, several interdisciplinary elements of the social sciences have gained recognition.

Varying Structures in Interdisciplinary Social Sciences

interdisciplinary

- areas, regions, cultures
- comparative study
- international relations
- environmental study
- social change analysis
- communications study
- value, policy, problem analysis
- urban studies

inclusive

- behavioral sciences
- policy sciences
- systems analysis
- total societies

bidisciplinary

- geography
  - geopolitics (political geography)
  - historical geography
  - human, social, cultural geography
  - economic geography
- history
  - historical geography
  - economic history
  - cultural or social history
  - political history
- political science
  - historical approach
  - political behavior, socialization
  - political geography
  - government finance and economic roles
  - economic anthropology
- anthropology
  - social or cultural anthropology
  - economic anthropology
- psychology
  - social psychology

The foregoing outline illustrates some of the overall structural relationships in the social sciences. Such broad, extensive combinations may, however, impress teachers less than do the specifics in a few areas of study. Three such interdisciplinary areas are chosen for brief discussion here.

International relations. Components of international or world study by social scientists include an impressive array of human problems, activities, and movements that extend beyond the boundaries of both nations and individual disciplines. Political scientists, somewhat more than others, study this realm. Still, each of the social science disciplines deals with some international elements as illustrated in the following suggestive though incomplete lists.

Political science--international law, (political) organizations, diplomatic relations, war, regional blocs, conferences and treaties.

Economics--international trade, aid, finance, development.

Sociology--comparative studies, migration, population, public opinion.

Anthropology--cross-cultural studies, races, cultural diffusion.

Geography--regions, geopolitics, food, resources, transportation.

History--elements above as involved in selected affairs of the past.

Readers may well react with the thought that some of the listed elements do not fit exclusively in or belong to the indicated disciplines. Support for this objection comes from recognition of the sources of data and methods of research used by specialists in international study. Some of the variety of social science disciplines that thus serve the scholars are listed here following each of the various main divisions of investigative efforts applied to international relations.

Political--political science, history, political geography.

Economic--economics, economic history, economic geography.

Communications--sociology, economics, geography, anthropology.

Law--political science, history.

War and peace--political science, history, social psychology.

Organization--political science, history, economics.

Ideologies--political science, philosophy, history.

Sociophychological aspects--sociology, psychology, anthropology.

Education--sociology, anthropology, economics, philosophy, comparative education.

Quite a variety of basic concepts both serve in and represent the results of research and interpretation in the field of international study. While numerous concepts may be listed, a few key ones illustrate here some of the key elements and analytical ideas in the field--diplomacy, trade, foreign policy, colonialism, imperialism, integration, isolation, aggression, crisis, and propaganda. An appropriate connotation for each of these terms may be suggested by attaching the words "among nations," "foreign," or "international." Thus integration refers to the process by which some groups of nations combine, or considerably interrelate, some of their mutual interests or activities, as in a regional bloc.

Research methods used in international study include several that are employed in the social science disciplines. Historical and contemporary surveys still appear often and usually involve documentary or statistical analysis. Comparative study frequently makes use of cross-cultural analysis. Field research is often undertaken by various techniques, sometimes involving case study. Recent years have witnessed an increase in the use of decision-making analysis, simulation techniques, and systems analysis. These approaches especially are apt to include the use of models. Model building also appears in other approaches and is particularly evident in research involving theory development.

Regional or area study. Closely related to international study, the investigation of regions or areas is probably most common in geography but also appears often in other disciplines or involves research methods of more than one discipline, and it may be broadly focused on multidisciplinary concerns. The basic terms "region" and "area" are variously used by scholars in reference to territory possessing one or more common characteristics. There is some consistency in use of the word region to refer to part of the territory of a nation, at least a large one, and "area" for a group of countries. By this approach, regions are exemplified by the southeastern United

States, the Nile River valley, and northern Korea; areas include the Far East, sub-Saharan Africa, and Latin America. Area studies sometimes include elements of area culture that extend beyond the social. Thus scholars in humanities as well as social scientists may become involved.

The multidisciplinary scope of regional or area study is illustrated by the following facets of a territory and its people that specialists in various regions or areas investigate.

Geography--spatial distribution, channels of convergence and diffusion.

Economy--flows of goods and services, areas of commercial activities.

Politics--governmental spheres, interrelations of levels of governments.

History--unifying and divisive movements, changing characteristics.

Culture--ethnic groups and relations, population trends, rural-urban elements.

Language--linguistic, semantic, and philological characteristics.

Arts--history and cultural relations of fine and practical arts.

There are a good many major concepts involved in and refined by research on regions and areas, but only a few are mentioned here. A region may be regarded on the basis of a single factor or a complex of factors that make for cohesion; the latter is in actuality almost the only type, except for some very small isolated territories, but the former often offers manageable scope for individual research studies. The uniform or homogeneous region is also relatively rare in contrast to the increasingly common nodal or focal region, one that centers on sectionalism (in larger areas, nationalism) and involves the emergence of subregions. Development can lead, through use of coordination, to regional integration.

Altogether various specialists use a diversity of research techniques in studying regions and areas, sometimes within the scope of a particular discipline, but often more inclusively. Descriptive and analytical surveys report on one or more characteristics of a territory. Such studies often involve field research conducted by varying methods. Comparative studies involve two or more territories. Some analyses interrelate one or more regions with the inclusive nation, or one or more nations with the encompassing area, or one or more communities with the enveloping region. Regional study sometimes involves development of theories of regionalism.

Mass communication. Defined most simply, communication is the act of exchanging messages. For practical purposes one-way and even unreceived messages are included. In societies with centralized and especially with highly technological production, much of the socially most important communication is distributed on a mass scale. Hence the concept of mass communication, embracing both electronic media (television, film and radio) and printed materials (especially newspapers and magazines). Even face-to-face (interpersonal) communication sometimes achieves mass dimensions, as in rumor dissemination and "underground" (not officially sanctioned or publicized) discussion.

Communication impinges on the scope of each of the social science disciplines. Some disciplines stress particular aspects of communication. Psychology, more than other social sciences, deals with *interpersonal* and *animal communication* and personality in relation to communication. Anthropologists give special attention to cultural functions of speech with music, arts, and rites as means of communication. Sociology stresses *public opinion* and mass *persuasion techniques*. Political scientists give more attention than others to *governmental communications*, *lobbying*, and *regulation of public media*.

But various basic elements and aspects of communications defy classification into disciplinary categories. *Mass culture*, *opinion leaders*, *public* taste, freedom of expression, media effects, and propaganda--these concepts scarcely fit into distinctive disciplines and do enter the research considerations of various scholarly specialists. Thus any inclusive view of mass communication recognizes its multidisciplinary nature. And the technical phases of communication lie largely beyond the social sciences.

Several key concepts in the study of communication have already been mentioned. A few additional ones will illustrate the range of concerns among those who investigate communication. Credibility of sources and media ownership or control receive distinctive attention. Some studies deal with characteristics of audiences (viewers, sales, or circulation) or public relations. Selective exposure, retention, and perception have been shown to result from audiences choosing what they want to see or hear, remember, and interpret among messages that communications present.

Research methods in communication are chiefly of two kinds. One type is experimental or semi-experimental. It has been found that experimental subjects often do not react in the laboratory the way they do in "real life." Surveys are commonly used, normally involving questionnaires or interviews and sometimes both. Opinion polls are the best known form of communications survey. Intensive case studies are sometimes made; they employ a variety of research techniques. Communications research frequently includes content analysis. Message content is analyzed for trends, variations, readability, representativeness, intent, or other characteristics. Audience or market research is common, much of it for use by businesses. It involves economic or other basic characteristics, such as the preferences or reactions, of actual or potential communications receivers. Systems analysis is done by comparison of communications systems in different societies.

Inclusive approaches. Further evidencing interdisciplinary interests, two major multidisciplinary regroupings of some elements of the social sciences have emerged during the past quarter-century. One of these is the area known as "behavioral sciences." Though the term seems not yet fixed, it is usually regarded as including sociology, non-physiological psychology, cultural anthropology, linguistics, and human biology. Some would add elements of political science, economics, law, psychiatry, and literature. A growing number of books and periodical articles refer by title to behavioral sciences, reflecting status that the term seems to be acquiring. Perhaps less established but also noteworthy is the term "policy sciences." Sprouting chiefly from political science, this area of investigation concentrates on decision processes and appraises the relevance of knowledge to the solution of certain problems. While it is not yet clear just what other disciplines are regularly involved, the policy sciences are concerned with other human affairs and values as well as with political dimensions. Still other approaches, broadly involving several disciplines, include the study of "total societies" that is, a society in its totality, and systems analysis. The latter is discussed below in relation to its use also as an approach in research.

Social scientists generally seem hesitant to pronounce inclusive and strong recommendations for structuring the curriculum below collegiate levels. Scholars who do so vary greatly in their approach. Such variation and hesitancy may arise from lack of opportunity, from preoccupation, from devotion to a viewpoint, or from humility. They can also reflect the diversity of structures that exist in the area of research and advanced training. Curriculum may require structuring, as many school personnel seem to believe. There is little hard evidence that a particular structure is better for teachers and students generally, any more than it would be for research scholars. The fullest implication of social sciences for structuring the curriculum appears to favor diversity rather than one approach over another. Thus both disciplinary and interdisciplinary study would logically be included.

Key Concepts in Multidisciplinary Social Sciences

What are the key terms representing basic ideas in the social sciences as a group? This section presents some illustrative, key concepts that extend beyond the concerns of individual social science disciplines. The concepts that follow are of two sorts. There are highly inclusive concepts--society, culture, interdependence, integration, and interaction. Each of these phenomena appears importantly in all or most of the social science disciplines. There are also linking concepts stressed in some disciplines but important in others--causation, change, conflict, environment, pluralism, region, and values.

Society constitutes the general subject that social scientists collectively investigate by means of research. The term refers inclusively to all people on earth ("human society") or to a major grouping (Western or Chinese or Mandarin society). Thus larger societies are made up of smaller societies. And in popular usage the word is used for some small organizations, especially artistic and professional. In verbal shorthand such phrases as "political" or "economic society" are heard, referring to the political (or economic) aspects, characteristics, or elements of a society. Traits or entities both tangible (artifacts) and intangible (customs) of a society form its "personality" or culture.

While in a loose way one may equate society with people, there are numerous interests, activities, and qualities investigated primarily in fields other than the social sciences. The term society encompasses the scope of the social sciences. These disciplines focus on relationships among people more than people as individuals (biography) or physical entities (biology) or collectors of cultural paraphenalia (genealogical, artistic, philatelic, numismatic, or other) which may excite the curious even if of limited social importance.

Social or cultural change receives much attention currently. Each of the social science disciplines investigates special types of change and some scholars, especially anthropologists, historians, and sociologists--often deal broadly with change. Some of the basic lines of investigation involve identification of the processes of change and its varying rates, extent, direction, and significance. Factors that generate change ("causes") are recognized as typically both internal and external to a given society, situation, or process.

Several key concepts help to explain change. Twentieth-century researchers have taken special interest in technologically induced change. Meanwhile the process of evolutionary change stimulated controversy, particularly as regards its physical manifestations. Scholars have devoted growing attention to revolution as a phenomenon often involving radical and rapid change. Both discontinuities and persistence appear in change through considerable periods of time. And sometimes there is a reversal of trends, as in the case of social backlash. Some changes appear to run in cycles, though the "pendulum theory" is at best a misleading oversimplification.

Social scientists use a variety of research methods in studying change. The historical method has doubtless been used the longest. Statistical analysis is a common approach, especially as much change is evidenced in quantitative elements. Panel study (repeatedly surveying the same sample population) has come into use recently as a means of investigating involvement in and attitudes toward change. Noteworthy effort is devoted to developing theories (inclusive rationales) to explain the complexities of change.

Social or cultural values constitute another highly significant multidisciplinary concept. Values represent interests and duties and likes and dislikes and still other affective objects of an individual group or society.

Cultural values constitute criteria or standards for desirable norms or states. Social scientists seek to ascertain the existence, extent, and intensity of values held by a population. Research (value analysis) involves study of testimony, choices, directions of interest, observable rewards and punishments, and comparative values in varying systems (societies).

The concept of conflict has gained researchers' special attention, especially in the behavioral sciences. Conflict constitutes the converse of the process of integration. Some institutions and forces serve as integrative instruments, for example, constitutions that are durable. Conflict arises from stress-strain situations and relationships, particularly between an in-group and an out-group. Conflict may involve ideological goals and, especially if severe, may have structural impact on a society. Techniques for conflict prevention are the object of some research.

This limited sampling of multidisciplinary concepts in social sciences may have suggestive value for elementary and secondary schooling. It appears that the aim of much instruction has been simply to identify and describe institutions, agencies, groups, events, and entities. The school program could provide a fuller flavoring of social sciences by exploring the vital processes of society as social scientists have investigated, identified, and explained them.

Research Methods in Multidisciplinary Social Sciences

Even more than in other respects, the social sciences are interdisciplinary in research methodology. Within individual disciplines, specialists frequently borrow research techniques developed or used largely in other disciplines. Historical method and regional analysis, for example appear among the modes of inquiry in several social sciences. In addition, various research methods, approaches, designs, and techniques are commonly used in different disciplines and in multidisciplinary research studies. Such methods can scarcely be said to belong to a single discipline. The behavioral sciences particularly share a number of research methods. Among these are comparative studies, systems analysis, surveys, statistical analysis, cross-disciplinary field studies, and content analysis. Three of these general research methods or approaches are discussed briefly here in order to indicate something of the nature of multidisciplinary research.

Content analysis is applied literally to communication, or more specifically to messages. Most often, already available data (previous communications) are used, though sometimes investigations involve the formulation of new messages for analysis. Techniques usually include the coding (classification) of selected parts or all of the communications investigated. In a sense, the researcher reorganizes a message to fit categories that identify elements or characteristics he seeks. Messages are appraised regarding internal or external criteria or both. An investigator may analyze the pertinence of supporting statements to conclusions, the frequency of loaded phrases or mass appeals or contradictory statements. He may seek to ascertain the accuracy, authenticity, validity, reliability, or consistency of statements. He may search for evidence of the message, the orginator's motives, psychological or economic state or political or ethnic views, or relationships among individuals or groups that the messages concern. In actuality the researcher may only describe, but usually he also evaluates the communications he studies. Content analysis finds a broad range of uses in, for example, the study of interpersonal interactions (including therapy), public speakers and audiences, propaganda and advertising, political communications, artistic work (especially that with verbal content), the mass media, business correspondence, and various age or ethnic or national or other cultural, political or economic groups. Potentially the content for research seems limitless. But the careful, intensive process of content analysis should not be confused with the looser statements of message reaction that characterize common expression of opinion or even book reviews.

Systems analysis attempts to deal inclusively with a complex aggregate of socially important phenomena. By simplified definition a system is a set of entities with identifiable relations that permit deductions. The researcher attempts to unravel such a bundle of relationships and, through analysis, to find explanations for their existence and operation. The units, or parts, of a system function in a describable situation or environment at a given time. A social system, that is, people in specified interrelationships, operates with cultural patterns that maintain or support it. The components of a social system are interdependent. A system is composed of various subsystems, as "the religious system" with its distinguishable component systems.

How does a researcher go about the study of a total society, a whole industry, an entire political system, schools collectively, or that complex of parental care for the young? Brief answers here can only suggest the general nature of the approach. In a broad sense the investigator hypothesizes that certain key factors are interrelated in a system. He selects a workably minimum number of examples and gathers a minimum satisfactory amount of pertinent information. Through statistical or other analysis he attempts to "put the parts together" in various relationships. Ultimately he selects the pattern of relations that seems to explain most satisfactorily the operation of the system.

Probably the best known example of a systems approach is macroeconomics, or macroanalysis by economists. The focus is on major components of an economic system in its entirety rather than on separate elements studied intensively. Thus data may include such large factors as total demand deposits (in financial institutions), gross national product, the sum of new housing starts (in construction), and overall employment or unemployment. Interrelating the components of an economic system, or of its subsystems, enables the macroeconomist to arrive at conclusions about how the system operates and judgments about the health of the economy at a given time. As any dynamic system varies from point to point in time, it is important that data be gathered and analyzed recurrently.

Statistical analysis is essential to research in practically all the disciplines and other areas of the social sciences. The vast expanse and diversity of phenomena plus the rapid growth of quantitative measures have combined to produce an overwhelming volume of statistical data. Correspondingly, the means of gathering, arranging, and interpreting statistics have developed to a point that requires several college courses and numerous books to explain them. Here it is intended to illustrate some of the prime uses and techniques of statistics in the social sciences.

Many statistical data fill an essential role in the functioning of present-day society. It seems inconceivable that major components of the economic, political, or social systems could operate without a regular flow of statistical information on both their activities and the related people, resources, processes, and products. The gathering of statistics serve an essential role in the functioning of society as well as providing a means of analyzing its complex nature, extent, and operation.

Statistics tell basically how much (or many). They also furnish evidence of typicalness (averages) and variations (dispersions) within a group of people or things. Characteristics may be compared by statistical analysis of relationships, the best known type being correlation. There are possible errors or traps in interpreting such data. For example, half of anything can be above average only insofar as another half is below average. While some human traits are normally distributed with a heavy concentration around average (a bell-shaped curve), other characteristics are distributed in other patterns. The fact of a statistical relationship between groups, characteristics, or things may be coincidental and is not necessarily casual.

A practical necessity in social science is research is sampling techniques that enable statisticians to learn about a larger group by gathering data on a small number of people or things through questionnaires, tests, interviews, or observation. There is considerable difficulty and danger in securing a sample that is adequate to represent accurately the larger group. Statistical procedures have been developed to aid in determining the reliability of particular sampling techniques. The selection of a sample may properly be random, or it may be more appropriately done by choosing cases that represent certain key characteristics of a group.

Multidisciplinary research techniques in the social sciences may desirably be reflected in school programs. Students could profit from learning about such ways in which social data are gathered and analyzed as they apply to political, economic, and other human affairs. The widespread use of these research methods implies that citizens will often come upon their results even in popular sources of information. Ability to interpret such reports, or misreports, can make for a better informed citizenry.

Present Trends in Multidisciplinary Social Sciences

What directions are the social sciences taking as a group of disciplines and interdisciplinary components? These concluding pages seek to identify some outstanding trends that have become tangibly evident in the field of social sciences.

Perhaps the most notable trend of all is the growth of the social sciences. By any of several measures, the field continues to expand rapidly. An increasing number of researchers conducts ever more investigations into the nature of society. While the amount of financial support, personnel, and studies still lags behind the sciences, the growth of social science research is impressive. Growth in research has both facilitated and resulted from the expansion of advanced training programs. More institutions, faculty, and students than ever before are increasing the supply of qualified personnel.

As in other fields of scholarly endeavor, growth in the social sciences is marked by ever increasing specialization. Yesterday's new area of investigation becomes today's established component of the field and tomorrow's base for further division. Both scholars and some others recurrently voice concern over some of the problems that accompany fragmentation, segmentation, and multiplying compartments. Some leading social scientists, however, are quick to point out that not all specialization is diverse. Often a new speciality involves bidisciplinary or other interdisciplinary elements. Thus some of the increasing specialization develops interrelation if not integration among the social sciences. Though it oversimplifies, the image of a honeycomb or spider's web provides an analogy with segments that connect as well as separate.

In other ways, too, the social sciences reflect growing recognition of some areas of mutual concern. The closely related interests of some social scientists, including some quite outstanding ones, find facilitation in a variety of channels. There are at least a few locations of national or even international stature for scholars to pursue their interests with others from related disciplines; the Ford Foundation-supported Center for Advanced Study in Behavioral Sciences in California is a prime example. Several established professional associations furnish means of bringing together scholars from various disciplines and with interdisciplinary specialities; these organizations include the Social Science Research Council, the American Academy of Political and Social Sciences, and the Society of General Systems Research. Additionally there are numerous examples of local or state groups and social institutes, projects, or programs at colleges and universities that bring together social scientists of varied but related interests.

While one may correctly visualize social scientists as typically associated with colleges and universities, as many as an estimated one-third of professionals in the field is employed in other organizations. Governmental agencies of diverse sorts involve quite a few professionals, while a limited but growing number work for industries. The RAND Corporation is a noteworthy example. Acceptance of social scientists in such positions lends credence to what some scholars regard as the most important single trend in the field--increased general recognition of social sciences as sciences. An increasingly educated public supports research that has improving validity, importance, and utility. Slow public acceptance of results is sometimes discouraging, but the trend is clearly upward.

Recent and current trends in the social sciences offer bases for encouragement to elementary and secondary school teachers in this field. A reasonable degree of acquaintance with the field implies that there are important elements of both disciplinary and interdisciplinary nature that may be dealt with at various levels of instruction. Teachers who possess some depth of background in one or more social sciences should find that their fellow educators and the public will, at least slowly if not always readily, support their efforts to improve understanding of humanity.

Perhaps, as has been suggested, the field is little beyond the developmental point of doing more harm than good. But even that low estimate promises a bright if dangerous future. In social as in physical sciences, human knowledge seems now on the threshold of making possible some significant changes in human existence. Whether these changes can shape better ways of living for both the individual and society constitutes the challenge of the future.

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